Biological Assessment

3004 Sequit Drive (APN - 4457-016-064), Malibu,
Los Angeles County, California

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June 10, 2016

This report is a true and accurate statement regarding biological resources located on the property commonly known as 3004 Sequit Drive (APN - 4457-016-064), Malibu, Los Angeles County, California. This report complies with Title 22 of the Santa Monica Mountains, Local Coastal Program, Local Implementation Plan, 2014 and Section 2, Chapter D of the Santa Monica Mountains, Local Coastal Program, Land Use Plan, 2014.

	06-10-2016
Signature	*Date*

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LOCATION

The 0.39 acre (~ 16,988 square foot) property commonly known as 3004 Sequit Drive (APN - 4457-016-064), Malibu, Los Angeles County, California is located on the southern flank of the Santa Monica Mountains about 1.9 miles east of Latigo Canyon Road, 2.8 miles west of Malibu Canyon Road, and approximately 0.75 miles north of Pacific Coast Highway in the rural village of El Nido. It is located in the Solstice Canyon Watershed and within the area covered by the U.S. Geological Survey's 7.5-minute Malibu Beach quadrangle. The location of the property is depicted in Exhibit A. The property slopes gently from northeast to southwest, then drops steeply to Sequit Drive. Rock outcrop dominates the drop. Although parts of the rock outcrop are natural, the majority of it appears to have been cut, which presumably occurred during construction of Sequit Drive. Elevation of the property ranges from approximately 102 feet (~31 meters) to 252 feet (~77 meters).

PROJECT

The proposed project falls within the footprint of the development envelope of a previously issued Coastal Development Permit and includes construction of a one-bedroom single-family residence with attached garage, driveway and motor court, utilities, and landscaping. The maximum allowable development area for the property is 2,729 square feet. The development area of the proposed project is much less. The site plan is included as Exhibit B. The fuel-modification plan extends only to the property boundary; there is no Zone C. The fuel modification plan is included as Exhibit C.

PURPOSE

The Santa Monica Mountains Local Coastal Plan-Net (SMM LCP-Net) Biological Resource Overlay depicts H1 Habitat within 200 feet of the property. Per the Santa Monica Mountains Local Implementation Plan (SMM LIP) a Biological Assessment is required for new development proposed within 200 feet of H1 Habitat, H2-High Scrutiny Habitat, or H2 Habitat. Development is proposed within 200 feet of mapped H1 Habitat.

DESKTOP REVIEW

The biologists reviewed maps, documents, and a number of other resources including –

1. Aerial photographs dated between 1947 and 2015,

2. The Santa Monica Mountains Local Implementation Plan (SMM-LIP) Biological Resource Map,

3. The SMM LCP-Net Biological Resource Overlay,

4. The US. Fish and Wildlife Services (USFWS), National Wetlands Inventory,[1]

5. The U.S. Department of Agriculture Soil Conservation Service's Web Soil Survey to determine soil

1 http://www.fws.gov/wetlands/Data/Mapper.html

and substrate types that occur on the property,

6. The California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants (IREP) to identify special-status plant species known to occur at or near the property,[2]

7. The CDFW California Natural Diversity Database (CNDDB), Rarefind 5, and the Biogeographic and Observation System (BIOS) to identify special-status species known to occur at or near the property.[3]

8. The CDFW list of "Special Animals",[4]

9. The CDFW list of "Fully Protected Animals",[5]

10. The CDFW list of "State and Federally Endangered and Threatened Animals of California",[6]

11. The CDFW list of "Special Vascular Plants, Bryophytes, and Lichens",[7]

12. The CDFW list of "State and Federally Listed Endangered, Threatened, and Rare Plants of California",[8]

13. The USFWS, Sacramento Office's "Proposed and Candidate Species" system,[9] and the

14. Los Angeles County's Sensitive Bird Species.[10]

The CNPS IREP tracks the status of hundreds of plant species and includes information on the distribution, ecology, and conservation status of California's rare, threatened, and endangered plants. The CNPS data are widely accepted as the standard for information on the status of the flora of California. The CNPS recognizes more than 1600 plant taxa (species, subspecies and varieties) as rare, threatened, or endangered in California, more than 500 additional species that have limited distribution, and approximately 55 additional species for which the CNPS needs more information. The IREP also contains information on approximately 25 species presumed to have become extinct in California in the last 100 years. The CNDDB is part of a nationwide network overseen by NatureServe. The CNDDB includes Rarefind 5 and BIOS, which include locations and natural history information on special status plants and animals and natural communities throughout California. The data help drive conservation decisions, aid in the environmental review of projects and land use changes,

2 California Native Plant Society, 2015, Inventory of Rare and Endangered Plants

3 CAL. Fish & Wildlife, Wildlife & Habitat Data Analysis Branch, California Natural Diversity Database, May 2016

4 CAL. Fish & Wildlife, Special Animals, April 2016

5 CAL. Fish & Wildlife, Fully Protected Animals, May 2003

6 CAL. Fish & Wildlife, State & Federally Endangered & Threatened Animals of California, April 2016

7 CAL. Fish & Wildlife, Special Vascular Plants, Bryophytes, & Lichens, April 2016

8 CAL. Fish & Wildlife, State & Federally Listed Endangered, Threatened, & Rare Plants of California, April 2016

9 US Fish and Wildlife Service, Sacramento Fish & Wildlife Office, Proposed & Candidate Species, Threatened & Endangered Species System, Accessed May, 2016

10 Western Tanager, January/February 2009. A Publication of the Los Angles Audubon, Volume 74:3

and provide baseline data helpful in recovering rare, threatened, and endangered species. The goal of the CNDDB is to provide the most current information available on the state's most imperiled elements of natural diversity and to provide tools to analyze these data.

The species on the CDFW lists are considered to be those of greatest conservation need and are commonly referred to as special-status species. Special-status species include those protected by the State Endangered Species Act,[11] the Federal Endangered Species Act,[12] the California Fish and Game Code,[13] as well as all other species that appear on the lists. Because the CDFW considers the species on these lists to be those of greatest conservation need, the biologists includes an analysis of all species that are known to occur in the region. The biologists also rely on these lists for current species designations. Mountain lions (*Puma concolor*) range across the entire Santa Monica Mountains and have safely negotiated Highway 101 and Interstate 405. This movement indicates that the Santa Monica Mountains remain relatively connected; therefore, the biologists believes it prudent to consider all special-status species known to occur across the entire mountain range and areas to the north, east, and west. The biologists conducted the CNDDB, Rarefind 5, BIOS, and IREP reviews by searching the U.S. Geological Service's 7.5-minute quadrangles of Beverly Hills, Calabasas, Camarillo, Canoga Park, Malibu Beach, Moorpark, Newbury Park, Oak Mountain, Point Dume, Point Mugu, San Fernando, Santa Paula, Santa Susana, Simi, Thousand Oaks, Topanga, Triunfo Pass, and Van Nuys. These 16 quadrangles cover the entire Santa Monica Mountains and areas well to the north, east, and west. The Los Angeles County Sensitive Bird Species list is comprised of 70 species that the Los Angeles County Sensitive Bird Species Working Group considers to be sensitive. Thirty-two of these species are not afforded protection by the State or Federal Endangered Species Acts or by the California Fish and Game Code. The species on the list are addressed in this report.

SURVEY METHODOLOGY

Andrew McGinn Forde visited the property on October 30, 2015 and May 24, 2016. Dr. Edith Read visited the property on April 6 and May 20, 2016. During the site visits, the biologists walked the property in a manner that provided 100% visual coverage in an effort to identify and document biological resources. The biologists documented species observed and searched in and around shrubs for wildlife, signs of wildlife, woodrat houses, burrows, potential roost sites for bats, and bird nests, looked under rocks, wood, and other surface debris, and used binocular to identify wildlife on and adjacent the property. The biologists also mapped the extent of streams and wetlands under jurisdiction of the California Department of Fish and Wildlife (CDFW), the U.S. Army Corp of Engineers (ACOE), and the Regional Water Quality Control Board (RWQCB), native plant communities and trees, locations of special-status species, and any resources that could potentially be used by them, if present.

11 CAL. Fish & Game Code §§ 2050-2097

12 16 U.S.C. §§ 1531-1544

13 CAL. Fish & Game Code §§ 3511, 4700, 5050, & 5515

STREAMS & WETLANDS

The ACOE regulates "dredge" and "fill" in waters of the U.S. including adjacent wetlands under the authority of Section 404 of the Clean Water Act.[14] The Act makes it unlawful to discharge dredged materials or fill in waters of the U.S. including adjacent wetlands without a public interest review period and a permit from the ACOE. The Code of Federal Regulations defines "waters of the U.S." as intrastate lakes, rivers, streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds.[15] The code defines wetlands as "areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." The 1987 Wetland Delineation Manual provides technical guidance and procedures for identifying and delineating wetlands that may be subject to regulatory jurisdiction under Section 404 of the Clean Water Act.[16] In the arid west, the ACOE uses the *"Interim regional supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region."* The regional supplement is designed for use with the 1987 Wetland Delineation Manual. Where differences in the two documents occur, the regional supplement takes precedence. The regional supplement presents wetland indicators, guidance, and other information that is specific to the Arid West Region.[17] The manual and supplement recommend use of the "National List of Plant Species that Occur in Wetlands" for hydrophytic classification of plants[18] and refer to the Natural Resources Conservation Service (NRCS) for hydric soil classifications. The methodology set out in the manual and the supplement is a three-parameter test that defines wetlands by the presence of hydrophytic vegetation, hydric soils, and hydrology. In the absence of wetlands, ACOE jurisdiction in non-tidal waters extends between the ordinary high water marks.[19]

Section 401 of the Clean Water Act requires that all federal agencies ensure that their actions do not violate water quality standards. Section 401 of the Clean Water Act requires all federal agencies protect physical, biological, and chemical integrity of its waters and ensure that their actions do not violate water quality standards. Under Section 401, the State of California has the authority to review any federal permits that may result in a discharge to wetlands and other waters under state jurisdiction. This is to ensure that the actions are consistent with the state's water quality requirements. In California, the RWQCB has been delegated as the state agency with the authority to regulate the quality of state waters, including discharge of dredged or fill materials, and thus provides a Section 401 certification to the ACOE.[20]

14 Clean Water Act of 1972 § 404. See also 33 U.S.C. § 1341

15 33 C.F.R. §§ 320 – 330

16 Environmental Lab., 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS

17 U.S. Army Corps of Engineers, 2006. Interim Regional Supplement to Corp of Engineers Wetland Delineation Manual: Arid West Region. Vicksburg, MS

18 Reed, P. B. 1988. National List of Plant Species that Occur in Wetlands: 1988 National Summary, Biological Report 88(24), USFWS, Washington, DC

19 33 C.F.R. § 328.3

20 Clean Water Act of 1972 § 401. See also 33 U.S.C. § 1341

The CDFW has jurisdictional authority over wetland resources associated with rivers, streams, and lakes under the authority of the California Fish and Game Code.[21] The CDFW regulates alteration of these resources through its Lake and Streambed Alteration Program, which requires execution of an agreement before any alteration of the natural flow of any river, stream, or lake.[22] The CDFW have adopted the U.S. Fish and Wildlife Service (USFWS) definition and classification system of wetlands. The USFWS defines wetlands as "lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports hydrophytes, (2) the substrate is predominantly non-drained hydric soil; and (3) the substrate is saturated with water or covered by shallow water at some time during the growing season of each year." The definition includes swamps; freshwater, brackish water, and saltwater marshes; bogs; vernal pools, periodically inundated salt flats; intertidal mudflats; wet meadows; wet pastures; springs and seeps; portions of lakes, ponds, rivers and streams; and all other areas which are periodically or permanently covered by shallow water, or dominated by hydrophytic vegetation, or in which the soils are predominantly hydric. The Code of Regulations defines a stream as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish and other aquatic life including watercourses having a surface or sub surface flow that supports or has supported riparian vegetation."[23] This applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. CDFW jurisdiction extends between the top of each bank and to the outer edge of contiguous riparian (= hydrophytic) vegetation. Riparian vegetation includes species listed on the "*National List of Plant Species that Occur in Wetlands*" that are defined as OBL, FACW, or FAC. CDFW jurisdiction extends between the top of each bank and to the outer edge of contiguous riparian vegetation and in some cases floodplains. "Bank" is defined as the "slope or elevation of land that bounds the bed of the stream in a permanent or long standing way, and that confines the stream water up to its highest level."[24]

The biologists did not observe any definable beds or banks, depressions, swales, or any other features or evidence indicating the presence of suitable hydrology necessary for the formation of hydric soils and growth of hydrophytic or riparian vegetation. There are no streams or wetlands located on the property; however, Dry Canyon Creek is located approximately 30 feet to the west. Dry Canyon Creek is an ephemeral tributary to Solstice Canyon Creek, which connects to the Pacific Ocean via a culvert under Pacific Coast Highway. Dry Canyon Creek falls under the jurisdiction of the SMM LCP-LIP, the CDFW, the ACOE, and the RWQCB. The SMM LCP-Net Biological Resource Overlay and the USFWS National Wetlands Inventory depict the creek. The inventory map is includes as Exhibit D.

21 CA. Fish & Game Code §§ 1600 – 1616

22 Cal. Fish and Game Code § 1602

23 14 C.C. R. § 1.72

24 People v. Osborn, 116 Cal. App. 4th 764, 11 Cal. Rptr. 3d 14 (2004)

PLANT COMMUNITIES

The property is located within the fuel-modification zones of adjacent single-family residencies and is routinely fuel-modified. There are two types of plant communities that occur on the property, Ruderal & Rock Outcrop. A third community, Arroyo Willow (*Salix lasiolepis*) Shrubland Alliance, dominates Dry Canyon Creek.

Ruderal

The ruderal community is dominated by tumbleweed (*Salsola tragus*) and other non-native species including European grasses (*Avena* ssp. & *Bromus* ssp.), fennel (*Foeniculum vulgare*), red-stemmed filaree (*Erodium cicutarium*), and Geraldton carnation weed (*Euphorbia terracina*). A handful of natives also occur in this area including California sagebrush (*Artemesia californica*) and laurel sumac (*Malosma luarina*); however, they are trimmed to the ground.

Rock Outcrop

Based on review of historical photographs and the site visits it appears that parts of the rock outcrop are natural; however, the majority of it was exposed during cutting of Sequit Drive. Native species including black sage (*Salvia mellifera*), California encelia (*Encelia californica*), California sagebrush, chamise (*Adenostoma fasciculatum*), coastal ashy-leaf buckwheat (*Eriogonum cinereum*), coyote brush (*Baccharis pilularis*), greenbark ceanothus (*Ceanothus spinosus*), and telegraph weed (*Heterotheca grandiflora*). These species are limited to just one or two individuals of each and dominate areas where thick soils have formed. Wishbone bush (*Mirabilis laevis* var. *crassifolia*), chalk liveforever (*Dudleya pulverulenta*), and phacelia (*Phacelia* spp.) also occur. Chaparral false bindweed (*Calystegia occidentalis*) occurs at the base of the rock outcrop along the edge of Sequit Drive. The non-native species described above also occur on the rock outcrop but appeared to be mostly restricted to the area directly on top of it and at its base. The rock outcrop does not appear to be fuel-modified.

Arroyo Willow (*Salix lasiolepis*) Shrubland Alliance

A relatively dense stand of Arroyo willow (*Salix lasiolepis*) dominates the length of Dry Canyon Creek where it occurs directly across from the property. Two mature California live oak (*Quercus argifolia*) trees are located along the bank of the creek. Species typically associated with coastal sage and chaparral communities also occur on and adjacent the creeks banks. Exhibit E includes a map depicting the communities. Photographs depicting the plant communities and condition of the property are included as Exhibit F. A complete list of species observed during the site visits is included in Exhibit G.

COMMON WILDLIFE

The biologists observed Great Basin fence lizard (*Sceloporus occidentalis longipes*), western side-blotched lizard (*Uta stansburiana elegaans*), Anna's hummingbird (*Calypte anna*), California towhee (*Melozone crissalis*), house finch (*Carpodacus mexicanus*), white-crowned sparrow (*Zonotrichia leucophrys*), yellow-rumped warbler (*Dendroica coronata*) and evidence suggesting the presence of valley pocket gopher (*Thomomys bottae*) and other small mammals on the property. Due to the condition of the property and its proximity to existing development, only a few other common species are expected to occur. Common species with potential to occur include, but are not limited to, Bewick's wren (*Thryomanes bewickii*), black phoebe (*Sayornis nigricans*), bushtit (*Psaltriparus minimus*), lesser goldfinch (*Spinus psaltria*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), western scrub jay (*Aphelocoma californica*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*). The property lacks features suitable for roosting bats; however, big brown bat (*Eptesicus fuscus*), canyon bat (*Parastrellus hesperus*), and free-tailed bat (*Tadarida brasiliensis*) likely forage over it. Other common species likely occur during spring and fall migration. A number of common species are also expected to utilize resources associated with Dry Canyon Creek including pacific treefrog (*Pseudacris regilla*), which is known to occur just upstream. Dry Canyon Creek is likely a breeding area for this species and other amphibians.

SPECIAL-STATUS SPECIES

The review of the CDFW CNDDB and the CNPS IREP revealed that a number of special-status species have been recorded within the area covered by the sixteen quadrangles used in the assessment. In fact, a non-specific polygon indicating the location of Lyon's pentachaeta (*Pentachaeta lyonii*), a Federal and State endangered species and a CNPS Rank 1B.1 species (Global Rank = G1, State Rank = S1), overlaps the property. The only other special-status plant species documented as occurring within 1 mile of the property include Parry's spineflower (*Chorizanthe parryi* var. *parryi*), a CNPS Rank 1B.1 species (Global Rank = 3T3, State Rank = S3). No special-status wildlife species are documented as occurring within 1-mile of the property; however, the biologists observed Cooper's hawk (*Accipiter cooperii*) along Sequit Drive (road kill) in 2015 and are of the opinion that many more special-status species occur within one-mile of the property. Exhibit H includes all the special-status species returned by the databases, their legal status, listing date, a brief description of habitat associations and requirements, and a statement regarding potential for occurrence based on known habitat associations and other factors; it also includes Los Angeles County Sensitive Bird Species. Transient and vagrant species are not addressed.[25] Exhibit I depicts the geographic locations of the known occurrences in the general region.

Special-Status Plants

Important factors to consider when evaluating potential for special-status plant species to occur are geographic location, elevation, vegetation type and structure, microhabitats, and fire history. Another important factor is soil type and soil chemistry. The U.S. Department of Agriculture Soil Conservation Service produces and publishes soil maps and reports for most areas within the U.S. including the Santa Monica Mountains National

25 Transients are species that pass through a geographical area and vagrants are species that are recognized as being outside their normal range.

Recreation Area. According to the Soil Survey, the dominant soil types that occur on the property area Urban Land-Xerorthents, landscaped complex (0% to 5% slopes) and Chumash-Boades-Malibu association (30% to 70% slopes). The major components of Urban Land-Xerorthents, landscaped complex includes Urban Land and Xerorthents, Landscaped. Urban Land is described as areas with houses, buildings, streets, parking lots, and associated landscaped areas. Xerorthents, Lanscaped is described as areas typically dominated by ornamental plants and lawns. The typical profile of this soil type is described as loam (A - 0 to 4 inches), loam (C - 4 to 52 inches), which overlies soft weathered bedrock (Cr - 52 to 62 inches). Parent material is colluvium and residuum derived from sedimentary rock and other mixed sources. It is well drained and is pH 7.4. Major components of the Chumash-Boades-Malibu association are Chumash, Boades, and Malibu. The typical profile of Chumash is described as gravelly loam (A - 0 to 7 inches) and soft, weathered bedrock (Cr - 7 to 17 inches). Parent material is colluvium and/or residuum derived from sandstone and shale.[26] It is somewhat excessively drained and has surface pH 6.8. The typical profile of Boades is described as loam (A1 - 0 to 2 inches), loam (A2 - 2 to 14 inches), and soft, weathered bedrock (Cr - 14 to 24 inches). Parent material is colluvium and/or residuum derived from sandstone and shale. It is well drained and has surface pH 6.0. The typical profile of Malibu is described as loam (A - 0 to 19 inches), clay (2Bt - 19 to 27 inches), and weathered bedrock (2Cr - 27 to 37 inches). Parent material is colluvium and/or residuum derived from interbedded sandstone and shale. It is moderately well drained and has surface pH 6.4. Minor components of the Chumash-Boades-Malibu association (30% to 75% slopes) are Pachic Argixerolls (~5% of map unit), Rock outcrop (~5% of map unit), and Cotharin (~5% of map unit). A map depicting distribution of soils on the property and other data are included in Exhibit J.

Based on condition of the property, lack of native plant communities, and site-specific study, the biologists determined that special-status species are not expected to occur and at best have low potential to occur. While the property is within an occurrence polygon for Lyon's pentachaeta, the only source of information for the occurrence is from a specimen collected in the general region in 1926. Based on what is known of the species, habitat for this species within the proposed development area is non-existent and the rock outcrop within the proposed fuel modification zone is of poor quality; it was mostly exposed by cutting of Sequit Drive, probability of occurrence is low. The biologists did not observe the species or any other special-status plant species during the site visits.

Special-Status Wildlife

Based on geographic location of the property, lack of dunes, vernal pools, streams and wetlands, native trees, native plant communities, and proximity to existing development, the special-status wildlife species considered in this assessment by the biologists are not expected to occur within the proposed development area and at best only have low potential to occur within the proposed fuel modification zone. The potential for occurrence of special-status wildlife species is mostly limited to Dry Canyon Creek and areas west of Sequit Drive.

26 Although derived from sandstone and /or shale, the gravelly loams and loams that occur on the property are not actually sandstone or shale's. They are, as stated, gravelly loams and loams, soft substrates that are formed under a completely different process than sandstones or shale's, which are hard substrates.

NESTING BIRDS

The Migratory Bird Treaty Act protects the majority of migratory birds breeding in the US. The Act specifically states that it is illegal "… for anyone to take … any migratory bird … nests, or eggs."[27] "Take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.[28] The California Fish & Game Code protects the nest or eggs of all birds and specifically states, "that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird."[29] The Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."[30] The biologists do not expect birds to nest within the proposed development area given the very limited amount of vegetation and lack of cover for ground nesting birds. There is potential for hummingbirds to utilize vegetation on the rock outcrop for nesting but the potential is very low given how sparse the vegetation is.

CONNECTIVITY - LINKAGES & CORRIDORS

The National Park Service, CDFW, and the Santa Monica Mountains Conservancy have expressed concerns about the adverse effects of urbanization on wildlife, particularly the fragmentation of habitat areas, which prevents the freedom of movement that species need. Preservation of linkages between large blocks of core habitat is of the utmost importance in the Santa Monica Mountains and preservation through linkages is a major concern. In general, a linkage is a feature that connects at least two blocks of habitat.[31, 32, 33, 34, 35] The assumed function of a linkage is to facilitate dispersal of individuals between blocks of habitat, allowing for long-term genetic interchange and for re-colonization of blocks of habitat from which populations have been locally extirpated.[36, 37, 38, 39] There are essentially two types of linkages, Landscape Linkages and Connectivity Choke Point Corridors. A Landscape Linkage may or may not be constricted, but it is essential to maintain the connectivity function of a particular region. A Connectivity Choke Point Corridor is a narrow, often short, and impacted corridor between blocks of habitat. This type of linkage typically requires that wildlife move through a choke point structure. Choke point structures include culverts, underpasses, overpasses, or tunnels that were not specifically designed for movement, but incidentally provide movement opportunities through otherwise impenetrable barriers.[40, 41] The SMM LCP-LIP defines a corridor as a passageway connecting two or more core habitats in order to promote genetic flow and continuous colonization of habitats by all plant and animal species within and between ecosystems. The property is located at the southwest corner of the rural village commonly known as El Nido. Single-family residencies are located immediately north, south, and east of the property. The property is not part of a wildlife corridor and offers little to no connectivity.

27 16 U.S.C. §§ 703-712, Migratory Bird Treaty Act of 1918 as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989

28 50 C.F.R. § 10.12

29 CAL. Fish & Game Code § 3503

30 CAL. Fish & Game Code § 86

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SMM LIP HABITAT CATEGORY DEFINITIONS

The SMM LCP-LIP has established three habitat categories in the Santa Monica Mountains, H1, H2, and H3. All H1 and H2 habitats are considered "Significant Environmental Resource Areas" (SERA). The SMM LCP-LIP includes a Biological Resources Map, and Biological Resource Overlays, which are available on the SMM LCP-Net. The purpose of the Biological Resources Map and the Biological Resource Overlays is to protect H1 and H2 Habitats. The map and overlays do not depict fix boundaries. If any of the criteria listed below are satisfied in areas that are not identified as H1 or H2, such locations will qualify for the designation.

H1 Habitat Definition

This category includes streams and wetlands, dunes, native grassland, alluvial scrub, coastal bluff scrub, native oak, sycamore, walnut, and bay woodlands, and rock outcrop. Chaparral and coastal sage scrub that occurs within or adjacent to streams, which functions as riparian habitat, is also considered to be H1 habitat. It also includes any habitat occupied by any plant or animal species listed by the State or federal government as rare, threatened or endangered, those assigned a Global or State conservation status rank of 1, 2, or 3 and identified as a Species of Special Concern by the CDFW, and populations of CNPS Rank 1B and 2 listed plant species.

H2 High Scrutiny Habitat Definition

H2 High Scrutiny Habitat includes habitats that should be given avoidance priority over other H2 Habitat. It includes areas occupied by plant and animal species listed by the State or federal government as rare, threatened, or endangered, those assigned a Global or State conservation status rank of 1, 2, or 3 and identified as Species of Special Concern by the CDFW, and CNPS Rank 1B and 2 plant species normally associated with H1 habitats, where they are found as individuals.

H2 Habitat Definition

H2 Habitat includes large contiguous areas of coastal sage scrub and chaparral-dominated habitats and native plant communities listed in the CNDDB. It also includes areas occupied by plant and animal species listed by the State or federal government as rare, threatened, or endangered, those assigned a Global or State conservation status rank of 1, 2, or 3 and identified as a Species of Special Concern by the CDFW, and CNPS Rank 1B and 2 listed plant species normally associated with H1 habitats, where they are found as individuals.

H3 Habitat Definition

H3 Habitat includes native vegetation communities that have been significantly disturbed or removed as part of lawfully established development or substantially fragmented or isolated by existing legal development and are no longer connected to large contiguous areas of coastal sage scrub or chaparral-dominated habitats. It also includes lawfully developed areas and lawfully disturbed areas dominated by non-native plants such as disturbed roadside slopes, stands of non-native trees and grasses, and fuel modification areas around legally existing development. This category further includes isolated and/or disturbed stands of native tree species that do not form a larger woodland or savannah habitat.

SMM LCP-NET MAPPED HABITAT CATEGORIES

The SMM LCP-Net Biological Resource Overlay depicts H3 Habitat as occurring on the property and H1 Habitat adjacent it. The H1 Habitat is associated with Dry Canyon Creek and is approximately 30 feet from the properties west boundary. The SMM LCP-Net Biological Resource Overlay is depicted in Exhibit K.

SITE-SPECIFIC HABITAT CATEGORIES

The biologists determined the habitat categories that occur on the property based on the SMM LIP habitat definitions, the plant communities that dominate it, and its condition, and proximity to adjacent development. A map depicting the habitats that occur on and adjacent the property is included as Exhibit L.

Site-Specific H1 Habitat

The biologists determined that there is no H1 Habitat on the property. There are no streams, wetlands or any other native habitats. The rock outcrop that occurs on the property is extremely limited in extent and the majority of it was exposed presumably for cutting of Sequit Drive.

Site-Specific H2 High Scrutiny Habitat

The biologists determined that there is no H2 High Scrutiny Habitat on the property.

Site-Specific H2 Habitat

The biologists determined that there is no H2 Habitat on the property.

Site-Specific H3 Habitat

The entire property is located within the fuel modification zones of adjacent single-family residencies and is subject to routine fuel-modification, and for the most part, lacks native plant communities. The fuel modification zones of the existing single-family residencies are depicted in Exhibit M. Given current condition of the property, the biologists determined that H3 Habitat dominates the property.

Table 1 - Acreages of On-Site Habitat Categories

Habitat Category	Habitat on-Site
H1 Habitat	0 acres
H2 High Scrutiny Habitat	0 acres
H2 Habitat	0 acres
H3 Habitat*	~0.39 acres

NATIVE TREE PROTECTION POLICIES

The Native Tree Protection Policies are designed to preserve oak (*Quercus* sp.), California bay (*Umbellularia californica*), California walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), and other native trees to the maximum extent feasible that are not otherwise protected as H1 Habitat, H2 High Scrutiny Habitat, or H2 Habitat. Trees protected by the policies must have at least one trunk measuring six inches or more in diameter or a combination of any two trunks measuring a total of eight inches or more in diameter, measured at four and one-half feet above natural grade.

The policies are -

1) Development shall be sited to prevent any encroachment into the protected zone of individual native trees to the maximum extent feasible.[42]

2) Removal of native trees shall be prohibited except where no other feasible alternative exists.

3) Removal of native trees or encroachment in the protected zone is prohibited for accessory uses or structures. If there is no feasible alternative that can prevent tree removal or encroachment, then the alternative that would result in the fewest or least-significant impacts shall be selected.

4) Adverse impacts to native trees shall be fully mitigated, with priority given to on-site mitigation.

5) Mitigation shall not substitute for implementation of the feasible project alternative that would avoid impacts to native trees and/or woodland habitat.

There are no protected trees located on or immediately adjacent the property. There are two California live oak trees located on the banks of Dry Canyon Creek. The locations of the trees are depicted in Exhibit E.

IMPACT ANALYSIS

The entire property is located within the fuel modification zones of adjacent single-family residencies and is routinely fuel-modified. The fuel-modification plan for the proposed single-family residence, which includes Zone A and B, extends only to the property boundary. There is no Zone C. If Zone C were required by the Fire Department, it would not extend beyond the existing fuel modification zones. The proposed development area lacks native plant and woodland communities, dunes, coastal bluffs, streams, and wetlands; it consists of non-native species and is defined as H3 Habitat. A rock outcrop occurs on the property. The rock outcrop is partly natural; however, the majority of it appears to have been exposed during cutting of Sequit Drive. The vegetation on the rock outcrop is sparse and although it is located within the fuel modification zones of

42 The protected zone is defined as the area from the trunk to five feet beyond the dripline of the tree or 15 feet from the trunk of the tree, whichever is greater.

adjacent single-family residencies, it does not appear to be fuel-modified. It is unlikely that vegetation on the rock outcrop would need to be fuel-modified as part of the proposed project due to low growth form of the woody species and overall sparseness. Due to the condition of the rock outcrop and the proximity to existing single-family residencies, the biologists determined that the rock outcrop is H3 Habitat. It is the opinion of the biologists, that there are no other habitat categories on the property. The proposed single-family residence will be located more than 100 feet from Dry Canyon Creek. A summary of habitat categories affected by the proposed project is included in Table 1 below.

Table 2 - Habitat Categories Affected by Proposed Development

Habitat Category	Proposed Development Area	Proposed Fuel Modification Zones
H1 Habitat	0 acres	0 acres
H2 High Scrutiny Habitat	0 acres	0 acres
H2 Habitat	0 acres	0 acres
H3 Habitat*	~0.06 acres	~0.33 acres

* The proposed development area is already subject to fuel-modification. There are no new impacts over and above those that already exist.

ALTERNATIVES

Rule of reason governs the range of alternatives for any project; therefore, alternatives need only address those that would avoid or reduce significant impacts and those that could feasibly meet the objectives of the project. Economic viability, site geology, availability of infrastructure and utilities, jurisdictional boundaries, location of natural resources, consistency with general plans and local coastal plans are factors that must be considered when addressing alternatives. The proposed single-family residence cannot be moved north or east due to required setbacks. It could conceivably move south; however, the distance between the proposed development and the nearby H1 Habitat (Dry Canyon Creek) would remain the same. Moving it west place it closer to the H1 Habitat. The proposed building site is the least damaging alternative.

RECOMMENDATIONS, AVOIDANCE STRATEGIES, & MITIGATION MEASURES

This section includes recommendations, avoidance strategies, and mitigation measures, as necessary that will reduce the potential for the project to affect the environment.

1. Fuel Modification of Rock Outcrop
    a. Fuel-modification of the rock outcrop shall be limited to the removal of non-native species, particularly Geraldton carnation weed, fennel, and tumbleweed. Removal shall be done by hand or by using hand held tools and care shall be taken not to dislodge loose rocks or trample native plant species.

b. Native woody species that occur on the rock outcrop shall be lolli-popped but only if absolutely necessary; they shall not be removed or trimmed to the ground.

c. Low growing native shrubs and herbaceous species shall be left in place.

d. The above recommendations should be added as notes to the fuel modification plan and should be a condition of the project.

2. Exterior Lighting
    a. Exterior light fixtures shall be minimized where possible on the west side of the proposed single-family residence and shall be shielded so that light is not cast down slope towards Dry Canyon Creek. Bulbs shall not exceed 60 watts, or the equivalent. Pathway, driveway, and parking area lights shall also be limited to fixtures that do not exceed two feet in height, and are also directed downward.

3. Report Awareness
    a. The permittee shall provide a copy of this Biological Assessment to all its contractors and ensure that they understand and implement the recommendations outlined above. The Biological Assessment shall also be provided to all owners/occupants of the single-family residence so that they can also implement recommendations 1 - 2 above.

4. Design Changes
    a. This assessment is based on the Site Plan (dated January 22, 2016) included in Exhibit B and the Fuel Modification Plan (dated January 22, 2016) included in Exhibit C. If there are any future design changes, the footprint of the SFR shall not be any closer to Dry Canyon Creek; it shall be behind the string line of the adjacent SFR's and fuel modification shall not extend beyond the property boundary. If there are any footprint changes, a note shall be included on the plan that states that the new design is consistent with measure 4 of the recommendations contained in the biological assessment. If the fuel modification plan is changed and it extends across Sequit Drive into Dry Canyon Creek, a new analysis shall be prepared.

REPORT PREPARATION

Andrew McGinn Forde prepared the report and all exhibits.

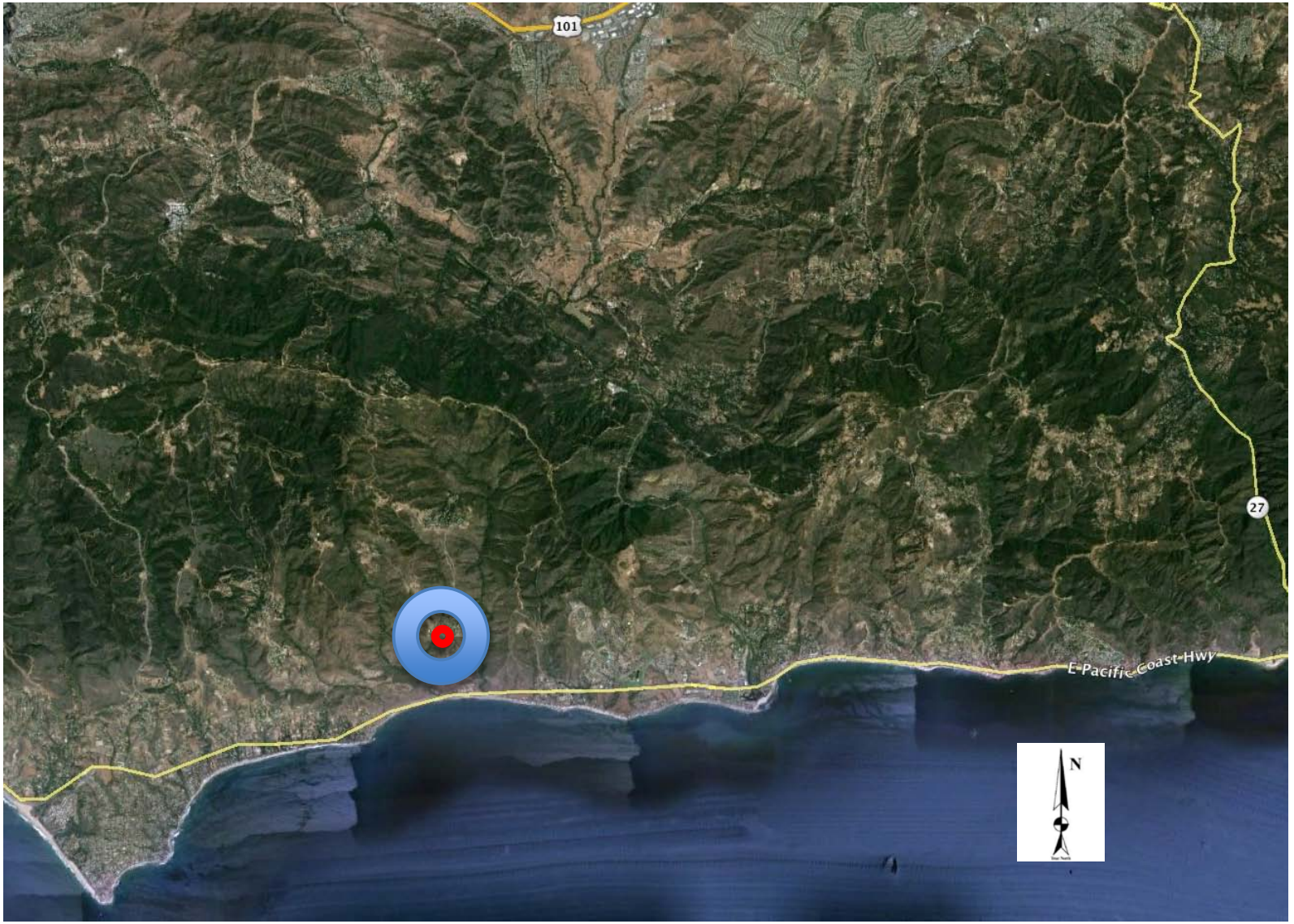


Exhibit A – Area of Interest

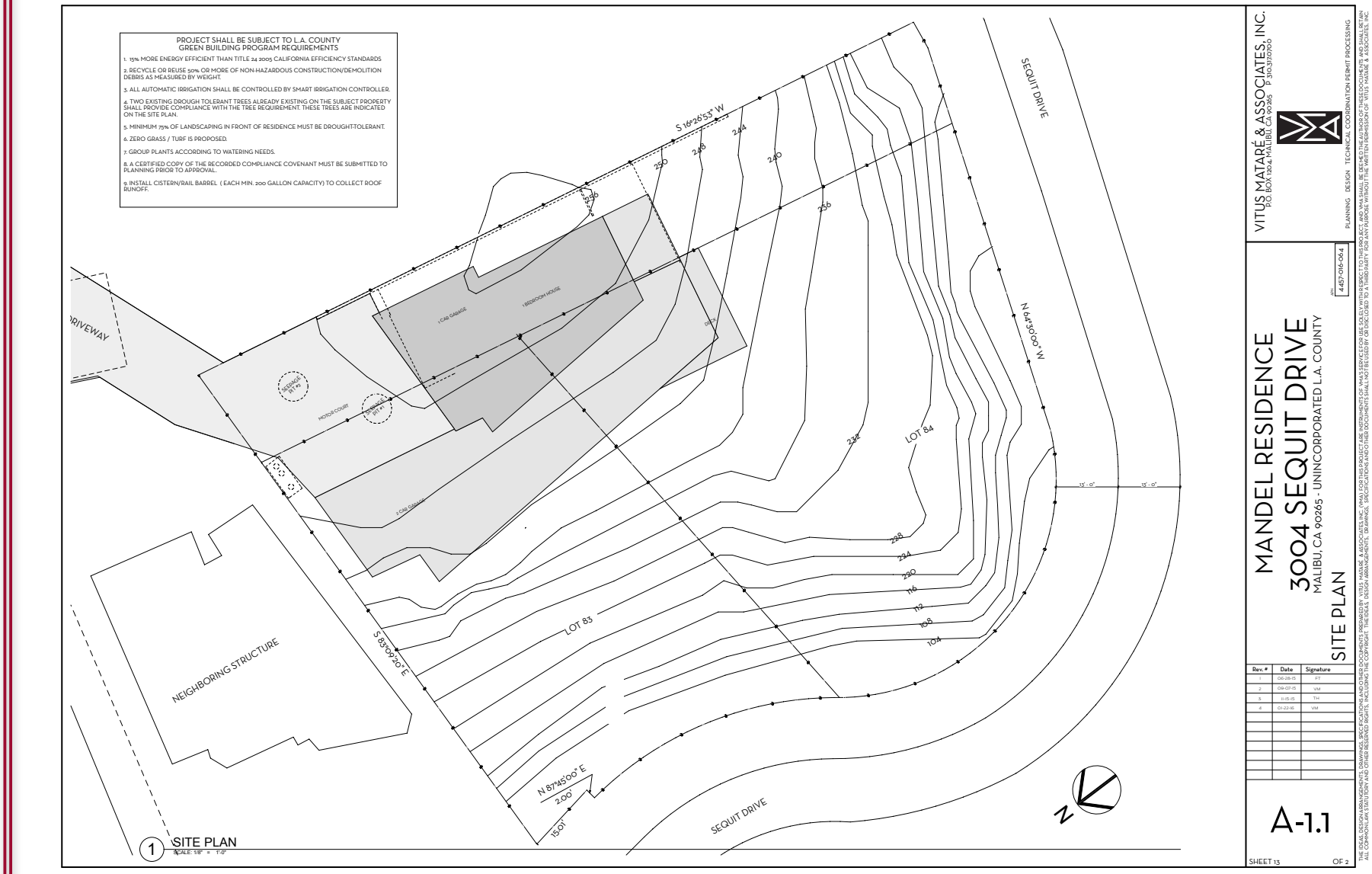


Exhibit B - Site Plan

ASSESSMENT NOTES AND MAINTENANCE AGREEMENT FOR FUEL MODIFICATION PLAN # 5718

Zone A – Setback Zone

- Extends 20 feet beyond the edge of any combustible structure, accessory structure, appendage or projection. Overhangs or other parts of the structure not accurately reflected on the plans may negate the approval of plant location on the approved plan.
- Irrigation by automatic or manual systems shall be provided to landscaping to maintain healthy vegetation and fire resistance.
- Landscaping and vegetation in this zone shall consist primarily of green lawns, ground covers not exceeding 6 inches in height, and adequately spaced shrubs. The overall characteristics of the landscape shall provide adequate defensible space in a fire environment.
- Plants in Zone A shall be inherently highly fire resistant and spaced appropriately. Species selection should be made referencing the Fuel Modification Plant List. Other species may be utilized subject to approval. Final or revised Plans submitted after 6 months from the initial submittal will have plants in all zones evaluated based on the most current *Fuel Modification Plant List* available from the Fuel Modification Unit.
- Except for dwarf varieties or mature trees small in stature, trees are generally **not recommended** within Zone A.
- Target species will typically not be allowed within 30 or more feet of combustible structures and may require removal if existing on site.
- Vines and climbing plants shall not be allowed on any combustible structure requiring review.

Zone B – Irrigated Zone

- Extends from the outermost edge of Zone A to 100 feet from structure.
- Irrigation by automatic or manual systems shall be provided to landscaping to maintain healthy vegetation and fire resistance.
- Landscaping and vegetation in this zone shall typically consist primarily of green lawns, ground covers, and adequately spaced shrubs and trees.
- Unless otherwise approved, Ground covers shall be maintained at a height not to exceed 6 inches in Zone A and B. If on a slope 12 inches is acceptable in Zone B within 50 feet of a structure and 18 inches beyond 50 feet. The overall characteristics of the landscape shall provide adequate defensible space in a fire environment. Specimen native plants may be approved to remain if properly maintained for adequate defensible space. Annual grasses and weeds shall be maintained at a height not to exceed 3 inches.
- Plants in Zone B shall typically be fire resistant and spaced appropriately. Species selection should be made referencing the Fuel Modification Plant List. Other species may be utilized subject to approval.
- Vegetation in this zone may consist of modified existing native plants, adequately spaced ornamental shrubs and trees, or both. There may also be replacement landscape planting with ornamental or native species to meet minimum slope coverage requirements of City or County agencies or other Landscape or Hillside ordinances. In all cases the overall characteristics of the landscape shall provide adequate defensible space in a fire environment.
- Target species will typically not be allowed within 30 or more feet of combustible structures and may require removal if existing on site. This distance may extend to 50 feet if the situation dictates.
- Irrigation systems are not required for this zone if it consists entirely of native plants. (Native plants are generally not compatible with regular, un-seasonal supplemental water.)
- All trees, unless otherwise approved, shall be planted far enough from structures and Fire Department accesses as to not overhang any structure or access at maturity.

Zone C – Native Brush Thinning Zone

- Extends from the outermost edge of Zone B up to 200 feet from structure or to property line
- Required thinning and clearance will be determined upon inspection. Required clearance may increase to the maximum allowed by the Fire Code as needed because of vegetation growth.
- Irrigation systems are not required for this zone if it consists entirely of native plants. (Native plants are generally not compatible with regular, un-seasonal supplemental water.)
- Vegetation in this zone may consist of modified existing native plants, adequately spaced ornamental shrubs and trees, or both. There may also be replacement landscape planting with ornamental or native species to meet minimum slope coverage requirements of City or County agencies or other Landscape or Hillside ordinances. In all cases the overall characteristics of the landscape shall provide adequate defensible space in a fire environment
- Plants in Zone C shall be spaced appropriately. Existing native vegetation shall be modified by thinning and removal of those species constituting a fire risk. These species include, but are not limited to chamise, sage, sage brush, and buckwheat.
- Annual grasses and weeds shall be maintained at a height not to exceed 3 inches.
- General spacing for existing native shrubs or groups of shrubs is 15 feet between canopies. Native plants may be thinned by reduced amounts as the distance from development increases.
- General spacing for existing native trees or groups of trees is 30 feet between canopies. This distance may increase or decrease depending on the slope, arrangement of the trees in relation to slope, and the species of tree.

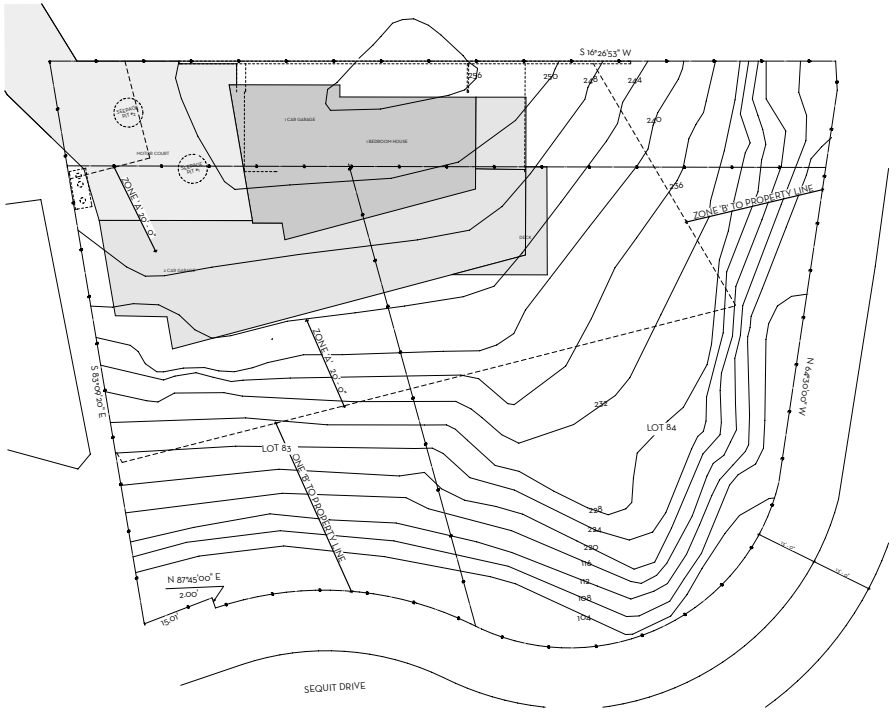
Fire Access Road Zone

- Extends a minimum of 10 feet from the edge of any public or private roadway that may be used as access for fire-fighting apparatus or resources.
- Clear and remove flammable growth for a minimum of 10 feet on each side of Fire Access Roads. (Fire Code 325.10) Additional clearance beyond 10 feet may be required upon inspection.
- Fire access roads, driveways and turnarounds shall be maintained in accordance with fire code. Fire Access Roads shall have unobstructed vertical clearance for a width of 20 feet. (Fire Code 503.2.1)
- Landscaping and native plants within the Fire Access Road Zone shall be appropriately spaced and maintained to provide safe egress in wildland fire environments.
- All trees, unless otherwise approved, shall be planted far enough from structures and Fire Department accesses as to not overhang any structure or access at maturity.

Maintenance

Routine maintenance shall be regularly performed in all zones. Requirements include but are not limited to those items in the Fuel Modification Guidelines and those outlined below:

- Removal or thinning of undesirable combustible vegetation and removal of dead or dying landscaping to meet minimum brush clearance requirements.
- Pruning and thinning to reduce the overall fuel load and continuity of fuels.
- Fuel loads shall be reduced by pruning lower branches of trees and tree-form shrubs to 1/3 of their height, or 6 feet from lowest hanging branches to the ground, to help prevent fire from spreading and make maintenance easier. Trees with understory plants should be limbed up at least three times the height of the underlying vegetation or up to a height of 40 feet, whichever is less, to help prevent fire from spreading upward into the crown.
- Accumulated plant litter and dead wood shall be removed. Debris and trimmings produced by thinning and pruning should be removed from the site or chipped and evenly dispersed in the same area to a maximum depth of 6 inches.
- All invasive species and their parts should be removed from the site.
- Manual and automatic irrigation systems shall be maintained for operational integrity and programming. Effectiveness should be regularly evaluated to avoid over or under-watering.
- Compliance with the Fire Code is a year-round responsibility. Enforcement will occur following inspection by the Fire Department. Annual inspections for brush clearance code requirements are conducted following the natural drying of grasses and fine fuels, between the months of April and June depending on geographic region. Inspection for compliance with an approved Fuel modification Plan may occur at any time of year.
- Brush Clearance enforcement issues on adjacent properties should be directed to the County of Los Angeles Fire Department's Brush Clearance Unit at (626) 969-2375.
- All future plantings shall be in accordance with the County of Los Angeles Fire Department Fuel Modification Guidelines and approved prior to installation. Changes to the approved plan which require an additional plan review will incur a plan review fee.
- Questions regarding landscape planting and maintenance with regard to fire safety should be directed to the Fire Department's Fuel Modification Unit at (626) 969-5205.



1 FUEL MODIFICATION PLAN
SCALE: 3/32" = 1'-0"

Long Term Maintenance Agreement

The property owner(s) agree to be responsible for the long-term maintenance of this Fuel Modification plan, as described herein. A Covenant & Agreement identifying the applicable Fuel Modification Plan will be recorded on the parcel(s) or CC&R's approved, prior to occupancy being granted. Notification of Fuel Modification requirements is to be made upon sale to new owners. Proposed changes to the Final Fuel Modification plan must be submitted to the Fuel Modification Unit for approval, prior to implementation. Plans will be reviewed based on the current plant list. Regular inspections will be performed by the Fire Department to ensure compliance with the approved plan. Failure to comply with the Fuel Modification Plan requirements may result in an Administrative Fine of at least $500 per violation, as well as possible liens, assessments, and legal action. Violations may also be corrected at the owners expense with the cost placed on the property tax bill with the addition of an Abatement Enforcement Cost of $648.

Name (Print) Signature Date

Name (Print) Signature Date

Approval of this Fuel Modification Plan constitutes approval for only those Codes reviewed as part of the Fuel Modification process and does not replace the needed approval of any other office or agency with jurisdiction and review responsibility for those items which may or may not be illustrated on the plan.

FUEL MODIFICATION PLAN #6008
FFFM# 201500834

VITUS MATARÉ & ASSOCIATES, INC.
P.O. BOX 1924 ▲ MALIBU, CA 90265 P 310.317.0700
PLANNING DESIGN TECHNICAL COORDINATION PERMIT PROCESSING

MANDEL RESIDENCE
3004 SEQUIT DRIVE
MALIBU, CA 90265 - UNINCORPORATED L.A. COUNTY
FUEL MODIFICATION PLAN

APN: 4457-016-064

Rev. #	Date	Signature
1	06-28-15	FT
2	09-07-15	VM
3	11-15-15	TH
4	01-22-16	VM

FM-1

SHEET 27 OF 2

Forde BIOLOGICAL CONSULTANTS

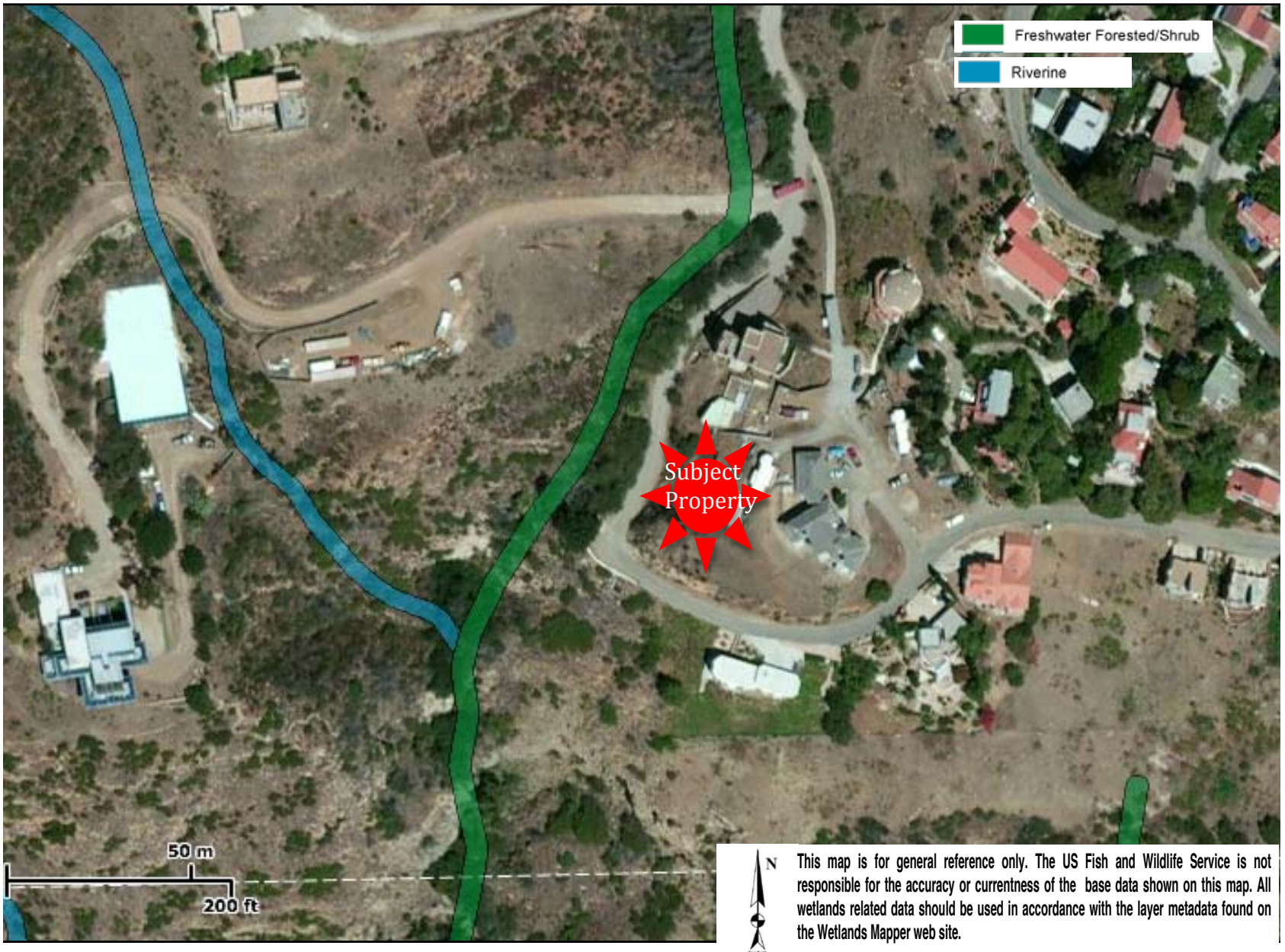


Exhibit D - USFWS National Wetlands Inventory Map

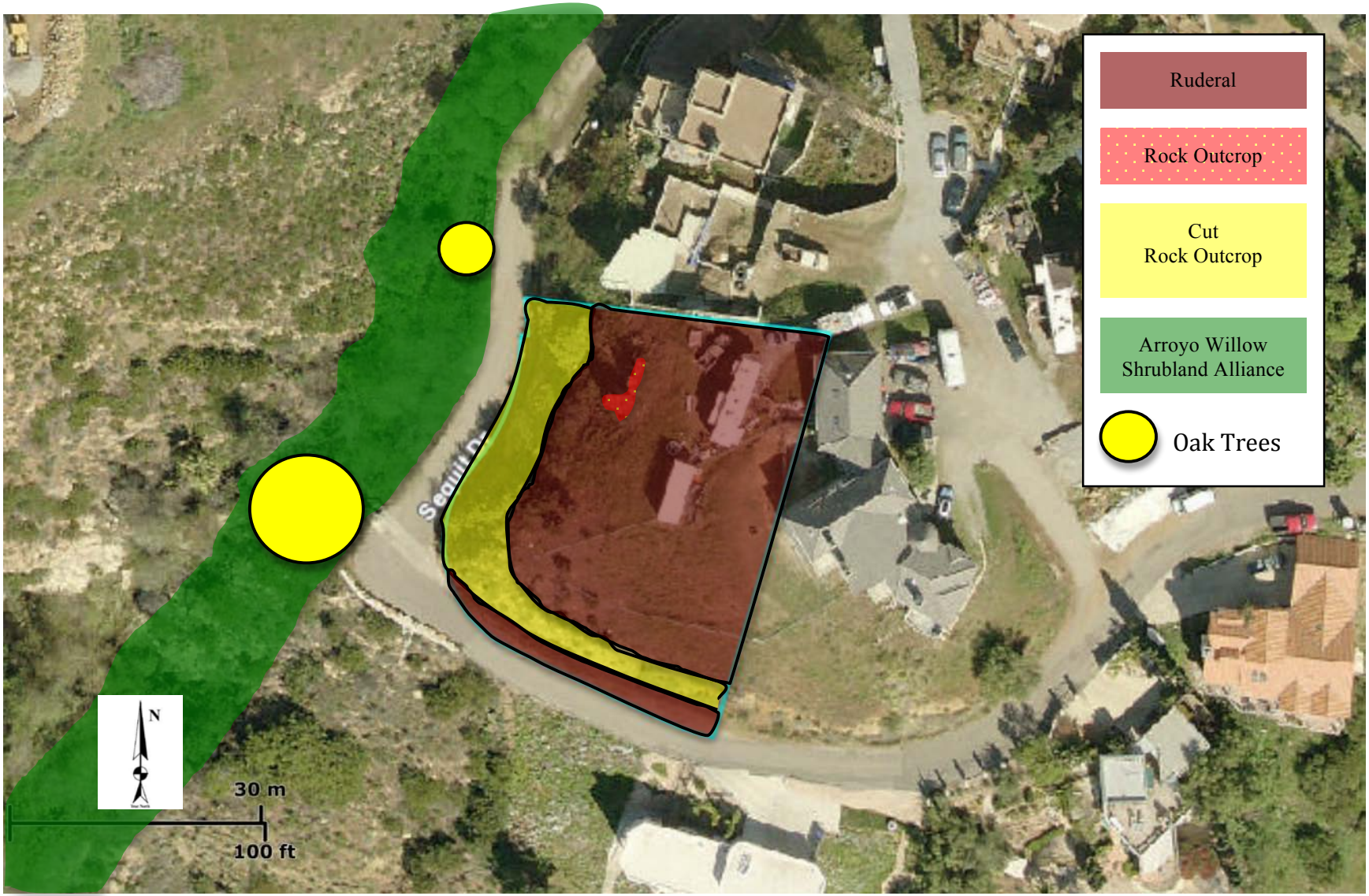


Exhibit E - Site-Specific Plant Community Map

Photo 1
Description: Ruderal Habitat

View: North from Eastern Boundary

Photo 2
Description: Ruderal Habitat

View: South from Northeast Corner of Property

Photo 3
Description: Rock Outcrop (Riparian Area Background Left)

View: Northwest from Sequit Drive

Photo 4
Description: Rock Outcrop

View: North from Sequit Drive

Exhibit F - Photo Locations

Latin Name	Common Name
DICOTS	**FLOWERING PLANTS**
Anacardiaceae	**Sumac Family**
Malosma laurina (Nutt.) Abrams	laurel sumac
Apiaceae	**Carrot Family**
Foeniculum vulgare Mill.*	fennel
Asteraceae	**Sunflower Family**
Artemisia californica Less.	California sagebrush
Baccharis pilularis DC.	Coyote Brush
Brickelia californica (Torrey & A. Gray) A. Gray	California brickelbush
Encelia californica Nutt.	coast sunflower
Eriophyllum confertiflorum (DC.) A. Gray	golden-yarrow
Hazardia squarrosa (Hook. & Arn.) Greene var. *grindelioides* (DC) W.D. Clark	saw-toothed goldenbush
*Heterotheca grandiflora*Nutt.	telegraph weed
Malacothrix saxatilis (Nutt.) Torrey & A. Gray	cliff aster
Sonchus oleraceus L.*	common sow thistle
Boraginaceae	**Borage Family**
Phacelia spp	phacelia
Brassicaceae	**Mustard Family**
Hirschfeldia incana (L.) Lagr.-Fossat*	wild mustard
Chenopodiaceae	**Goosefoot Family**
Salsola tragus L.*	Russian thistle
Convolvulaceae	**Morning Glory Family**
Calystegia occidentalis (A. Gray) Brummitt ssp. *fulcrata* (A.Gray) Brummitt	chaparral false bindweed
Crassulaceae	**Stonecrop Family**
Dudleya pulverulenta (Nutt.) Britt. & Rose	chalk liveforever
Euphorbiaceae	**Spurge Family**
Euphorbia terracina L.*	Geraldton carnation weed
Geraniaceae	**Geranium Family**
Erodium cicutarium (L.) L'Her.*	red-stem filaree
Lamiaceae	**Mint Family**
Salvia mellifera E. Greene	black sage
Nyctaginaceae	**Four-O'Clock Family**
Mirabilis laevis (Benth.) Curran var. *crassifolia* (Choisy) Spellenb.	California wishbone bush
Polygonaceae	**Buckwheat Family**
Eriogonum cinereum Benth.	ashy-leaved buckwheat
Rhamnaceae	**Buckthorn Family**
Ceanothus spinosus Nutt.	greenbark ceanothus
Rosaceae	**Rose Family**
Adenostoma fasciculatum Hook. & Arn.	Chamise
MONOCOTS	**GRASSES & ALLIES**
Poaceae	**Grass Family**
Avena spp.*	oat
Bromus diandrus Roth*	ripgut brome
Hordeum spp.	barley
Stipa lepida Hitchc.	foothill needlegrass

SCIENTIFIC NAME **COMMON NAME**	**STATUS (May 2016)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Abronia maritima Red sand verbena	--	--	4.2 G4/S3S4	0 m - 100 m Perennial Herb February - November	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found on coastal dunes. The proposed development envelope and fuel modification zone lack suitable habitat elements. There are no coastal dunes.
Asplenium verspertinum Maxon Western spleenwort	--	--	4.2 G4/S4	180 m - 1000 m Fern February - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found on rocky sites in chaparral, coastal scrub, and cismontane woodland. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Astragalus brauntonii Parish Braunton's milk-vetch	FE January 1997	--	1B.1 G2/S2	4 m - 640 m Perennial Herb January - August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in closed-cone coniferous forest, chaparral, coastal sage, valley and foothill grasslands, and recent burn or disturbed areas usually in association with sandstone with carbonate layers or down-wash sites (into which the seeds have drifted). Carbonate outcrops are extremely rare within its current range, and as a result, is naturally rare. The proposed development envelope and fuel modification zone lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (May 2016)** **Federal Status**	**State Status**	**CNPS Global Rank/ State Rank**	**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL** **(See notes at end of table for sources of information)**
Astragalus pycnostachyus Gray var. *lanosissimus* (Rydb.) Munz & McBurn. Ventura marsh milk-vetch	FE May 2001	SE April 2000	1B.1 G2T12/S1	1 m - 35 m Perennial Herb June - October	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Rediscovered near Oxnard in 1997 and known from only one natural occurrence composed of 30-50 reproductive plants. This species occurs in coastal dunes and edges of salt or brackish marshes and swamps. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Astragalus tener Gray var. *titi* (Eastw.) Barneby Coastal dunes milk-vetch	FE August 1998	SE February 1982	1B.1 G2T1/S1	1 m - 50 m Annual Herb March - May	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found in coastal bluff scrub with sandy soils, coastal dune, and mesic coastal prairie habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Atriplex coulteri (Moq.) D. Dietr. Coulter's saltbush	--	--	1B.2 G2/S2	3 m - 460 m Perennial Herb March-October	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with coastal dune, coastal scrub, coastal bluff scrub, and valley and foothill grassland habitats with alkaline or clay soils. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Atriplex parishii Wats. Parish's brittlescale	--	--	1B.1 G1G2/S1	25 m - 1900 m Annual Herb June - October	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with chenopod scrub, playas, and vernal pool habitats on alkaline substrates. The proposed development envelope and fuel modification zone lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (May 2016)** **Federal Status**	**State Status**	**CNPS Global Rank/ State Rank**	**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL** **(See notes at end of table for sources of information)**
Atriplex serenana A. Nels. var. *davidsonii* (Standl.) Munz Davidson's saltscale	--	--	1B.2 G5T1/S1	10 m - 200 m Annual Herb April - October	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Associated with coastal bluff scrub and coastal scrub on alkaline substrates. The only record of this taxon in the Santa Monica Mountains is from Malibu Canyon. The proposed development envelope lacks suitable elements. The fuel modification zone consists of marginally suitable habitat elements; however, the soil survey indicates that the soils on the property are acidic.
Baccharis malibuensis Beauchamp & Henrickson Malibu baccharis	--	--	1B.1 G1/S1	150 m - 305 m Perennial Shrub (Deciduous) August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Associated with coastal scrub, chaparral, cismontane woodland, and riparian woodland on Conejo Volcanic exposures.[1] The proposed development envelope and fuel modification zone lack suitable habitat elements.
Berberis nevinii Nevin's barberry	FE Octiber 1998	SE January 1987	1B.1	295 m - 825 m Shrub (Evergreen) March-June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Chaparral, cismontane, coastal scrub, and riparian scrub habitats with sandy or gravelly soils. Species is not known to occur in the Santa Monica Mountains.

[1] Conejo Volcanics occur in western Simi Valley from Big Mountain south through Mountclef Ridge in Santa Rosa Valley, the Conejo Hills, and the western Santa Monica Mountains to the ocean and west through the Malibu Creek watershed and upper Topanga Creek watershed. Skeletal limestone occurs as interbeds and neptunian dikes within the sequence of submarine andesitic / basaltic flows and hyalobreccias of the Conejo Volcanics. The Calabasas Formation, which overlies it, is made up of alternating layers of clayey to silty sandstone and silty shale with some areas having layers of breccia and lenses of chert in the shale.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (May 2016)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Calandrinia breweri S. Watson Brewer's calandrinia	--	--	4.2 G4/S3S4	10 m - 1200 m Annual Herb March - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with sandy or loamy soils on disturbed or burned sites in coastal scrub and chaparral. The proposed development envelope and fuel modification zone lack suitable habitat elements.
California macrophylla (Hook.&Arn.) Aldas, Navarro, Vargas, Saez & Aedo Round-leaved filaree	--	--	1B.1 G2/S2	10 m - 1220 m Annual Herb March - May	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with clay soils in cismontane woodland and grassland. Grass cover is generally low. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Calystegia sepium (L.) R. Br. ssp. *binghamiae* (E. Greene) Brummitt Santa Barbara morning-glory	--	--	1A G5TXQ/SX	0 m - 20 m Perennial Herb (Rhizomatous) August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Coastal marshes and swamps. Presumed extinct.
Calystegia peirsonii (Abrams) Brumitt Peirson's morning glory	--	--	4.2 G4/S4	30 m - 1500 m Perennial Herb April - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest. Species is not known to occur in the Santa Monica Mountains.

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Calochortus catalinae S. Watson Catalina mariposa lily	--	--	4.2 G4/S4	15 m - 700 m Perennial Herb (Bulbiferous) March - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs on heavy soil in openings and slopes in coastal scrub, chaparral, grassland, and cismontane woodland. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Calochortus clavatus S. Watson var. *clavatus* Club-haired mariposa lily	--	--	4.3 G4T3/S3	75 m - 1300 m Perennial Herb (Bulbiferous) May - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs on serpentine clay and rocky soils in coastal scrub, chaparral, grassland, and cismontane woodland. Species is not known to occur in the Santa Monica Mountains.
Calochortus clavatus S. Watson var. *gracilis* Ownbey Slender mariposa lily	--	--	1B.2 G4T2T3/S2S3	320 m - 1000 m Perennial Herb (Bulbiferous) March - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs in shaded canyons and grassy slopes in chaparral and oak woodlands habitats, often associated with serpentinite soils. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Calochortus plummerae E. Greene Plummer's mariposa lily	--	--	4.2 G4/S4	100 m - 1700 m Perennial Herb (Bulbiferous) May - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs on rocky and sandy sites, usually of alluvial or granitic material, in coastal scrub, chaparral, grassland, cismontane woodland, and lower montane coniferous forest. Can be common after a fire. The proposed development envelope lacks suitable elements. The fuel modification zone consists of marginally suitable habitat elements.

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Calochortus fimbriatus H. P. McDonald Late-flowered mariposa lily	--	--	1B.3 G3/S3	275 m - 1905 m Perennial Herb (Bulbiferous) June – August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs in chaparral, cismontane woodland, and riparian woodland often on serpentinite. Species is not known to occur in the Santa Monica Mountains.
Camissoniopsis lewisii (P.H. Raven) W.L. Wagner & Hoch Lewis' evening primrose	--	--	3 G4/S4	0 m - 300 m Annual Herb March - May	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs on sandy or clay soil in coastal scrub, coastal bluff scrub, grassland, and cismontane woodland. The only collection record from the Santa Monica Mountains is from Point Dume. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Canbya candida Parry White pygmy-poppy	--	--	4.2 G3G4/S3S4	600 m - 1460 m Annual Herb March - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs in joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland often in association with sandy granitic soils. Species is not known to occur in the Santa Monica Mountains.
Centromadia parryi (Greene) Greene ssp. *australis* (Keck) B.G. Baldwin Southern tarplant	--	--	1B.1 G3T2/S2	0 m - 425 m Annual Herb May - November	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs along margins of salt marsh and swamps, vernal pools, and vernally mesic valley and foothill grasslands. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Cercocarpus betuloides Torrey & A. Gray var. *blanchea* (C. Snyder) Little Island mountain mahogany	--	--	4.3 G5T4/S4	30 m - 600 m Shrub February - May	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs in chaparral. It is distinguished from the more common mountain mahogany by its larger leaves. There are several collection records from the Santa Monica Mountains but otherwise its distribution is poorly known. The biologist did not observe this species during the site visit.
Chaenactis glabriuscula DC var. *orcuttiana* (Greene) H.M. Hall Orcutt's pincushion	--	--	1B.1 G5T1/S1	< 100 m Annual Herb January - August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs on coastal dunes and in sandy coastal bluff scrub. The proposed development envelope and fuel modification zone lack suitable habitat elements. Thera re no coastal dune or coastal bluff scrub habitats.
Chloropyron maritimum (Benth.) A. Heller ssp. *maritimum* Salt marsh bird's-beak	FE September 1978	SE July 1979	1B.2 G4?T1/S1	0 m - 30 m Annual Herb (Hemiparasitic) May - October	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This taxon occurs in coastal dunes, salt marshes and swamps. The proposed development envelope and fuel modification zone lack suitable habitat elements. There are no coastal dunes, salt marshes, or swamps.
Chorizanthe parryi Wats. var. *fernandina* (Wats.) Jeps. San Fernando Valley spineflower	FC May 2004	SE August 2001	1B.1 G2T1/S3	150 m - 1035 m Annual Herb April - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs in open coastal scrub and grassland on sandy soil. There are no known occurrences in the Santa Monica Mountains south of Highway 101. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Chorizanthe parryi S. Watson var. *parryi* Parry's spineflower	--	--	1B.1 G3T3/S3	Wide Elevation Range Annual Herb May - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs on dry slopes and flats in sandy soil, typically in coastal scrub, chaparral, grassland, and oak woodland or in edges between these habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Convolvulus simulans Perry Small-flowered morning glory	--	--	4.2 G4/S4	30 m - 700 m Annual Herb March - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs on seeps and serpentine ridges in coastal scrub, chaparral, and grassland. The proposed development envelope and fuel modification zone lack suitable habitat elements. It lacks seeps and serpentine substrates.
Deinandra minthornii (Jeps.) B.G. Baldwin Santa Susana tarplant	--	SR November 1978	1B.2 G2/S2	280 m - 760 m Shrub (Deciduous) July - October	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs in chaparral and coastal scrub habitats in association with sandstone outcroppings and rocky areas. The proposed development envelope lacks suitable elements. The fuel modification zone consists of marginally suitable habitat elements; however, the biologist did not observe this species during the site visit.
Didymodon norrisii Norris' beard moss	--	--	2.2	600 m - 1973 m Bryophyte	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in seasonally wet sheet drainages within cismontane woodland and lower montane coniferous forest. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Dodecahema leptoceras (Gray) Rev. & Hardham Slender-horned spineflower	FE	CE	1B.1	200 m - 760 m Annual Herb April - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This specdies occurs in chaparral and coastal scrub (alluvian fan). Species is not known to occur in the Santa Monica Mountains.
Delphinium parryi Gray ssp. *blochmaniae* (Greene) Lewis & Epl. Dune larkspur	--	--	1B.2 G4T2/S2	0 m - 200 m Perennial Herb April - May	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This taxon is associated with maritime chaparral and coastal dune habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements. It lacks maritime chaparral and coastal dune habitats.
Delphinium parryi A. Gray ssp. *purpureum* (Harlan Lewis & Epling) M.J. Warnock Mt. Pinos larkspur	--	--	4.3 G4T4/S4	1000 m - 2600 m Perennial Herb May - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This taxon is associated with chaparral, pinyon-juniper woodland, and Mojavean desert scrub. Species is not known to occur in the Santa Monica Mountains.

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Dithyrea maritima A. Davids. Beach spectaclepod	--	ST February 1990	1B.1 G2/S1	3 m - 50 m Perennial Herb (Rhizomatous) March - May	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found in coastal dune and coastal scrub habitats with sandy soils. The proposed development envelope and fuel modification zone lack suitable habitat elements. It lacks coastal dune and coastal scrub habitats.
Dudleya blochmaniae (Eastw.) Moran ssp. *blochmaniae* Blochman's dudleya	--	--	1B.1 G2T2/S2	5 m - 450 m Perennial Herb April - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Known from fewer than twenty occurrences in California. It mostly occurs in coastal bluff scrub, coastal scrub, and grasslands on open, rocky slopes in shallow clays derived from ultramafic rocks, over serpentinite. The proposed development envelope and fuel modification zone lack suitable habitat elements. The biologists did not observe serpentinite outcrops.[2]
Dudleya cymosa (Lemaire) Britton & Rose ssp. *agourensis* K. Nakai Agoura Hills dudleya	FT January 1997	--	1B.2 G5T1/S2	200 m - 500 m Perennial Herb May - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is restricted to a band of late Pleistocene dissected gravels at road level, east of Kanan Rd, which climbs in elevation west to ~405 meters near Reyes Adobe Rd in an area dominated by chaparral and cismontane woodland habitat. The proposed development envelope and fuel modification zone lack suitable habitat elements. Property is well outside the known range of this species.

[2] Serpentine rock is apple green to black and often mottled with light and dark colored areas. It has a shiny or wax-like appearance and slightly soapy feel.

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Dudleya cymosa (Lem.) Britt. & Rose ssp. *marcescens* Moran Marcescent dudleya	FT January 1997	SR November 1978	1B.2 G5T2/S2	150 m - 520 m Perennial Herb April - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Associated with chaparral on lower reaches of sheer volcanic rock surfaces and canyon walls adjacent perennial streams dominated by live oak woodland, often with California Bay. In most locations, topographic relief has prevented deep soil formation; therefore, this dudleya may be the only flowering plant occurring in microhabitat otherwise dominated by mosses, lichens, and ferns. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Dudleya cymosa (Lem.) Britt. & Rose ssp. *ovatifolia* (Britt.) Moran Santa Monica Mountains dudleya	FT January 1997	--	1B.2 G5T1/S1	150 m - 1675 m Perennial Herb March - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs on shaded slopes and canyon bottoms on volcanic and sedimentary conglomerate rock on exposed north-facing slopes from near Westlake Village to Agoura Hills and deep canyon bottoms along lower Malibu Creek and Topanga Creek. The proposed development envelope and fuel modification zone lack suitable habitat elements. There are no exposures of both volcanic and sedimentary conglomerates.
Dudleya multicaulis (Rose) Moran Many-stemmed dudleya	--	--	1B.2 G2/S2	15 m - 790 m Perennial Herb April - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Associated with clay soils in chaparral, coastal scrub, and valley and foothill grassland habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Dudleya parva Rose & Davids. Conejo dudleya	FT January 1997	--	1B.2 G2/S2	60 m - 450 m Perennial Herb May - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Found in coastal scrub and valley and foothill grassland habitats, most commonly in cactus-dominated coastal sage scrub in association with rocky, gravelly, clay, and volcanic substrates derived from the Conejo volcanics and has a limited, discontinuous distribution from the western Simi Hills, along the Mountclef Ridge north to the Conejo Grade, a distance of about 10 miles. It has not been found south of Highway 101. The proposed development envelope and fuel modification zone lack suitable habitat elements. The property is well outide the species known range.
Dudleya verityi K. Nakai Verity's dudleya	FT January 1997	--	1B.1 G1/S1	60 m - 120 m Perennial Herb May - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found on exposures of Coneho Volcanics in chaparral, cismontane woodland, and coastal scrub. In the database search area its known distribution is confined to Conejo Mountain. The proposed development envelope and fuel modification zone lack suitable habitat elements. The property is well outide the species known range.
Eriogonum crocatum A. Davids. Conejo buckwheat	--	SR September 1979	1B.2 G1/S1	50 m - 580 m Perennial Herb April - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE The known distribution of this species is limited to the Conejo Valley and surrounding regions in Ventura County where it is found in openings in chaparral, coastal scrub, and valley and grassland habitats on exposures of Conejo Volcanics. The proposed development envelope and fuel modification zone lack suitable habitat elements. The property is well outide the species known range.

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Hordeum intercedens Nevski Vernal barley	--	--	3.2 G3G4/S3S4	5 m - 1000 m Annual Grass March - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs in vernal pools, saline streambeds and alkaline flats IN other habitat types including coastal dunes, coastal scrub, and grassland. The proposed development envelope and fuel modification zone lack suitable habitat elements. There are no vernal pools, saline streambeds, or alkaline flats.
Horkelia cuneata Lindl. var. *puberula* (Rydb.) Ertter & Reveal Mesa horkelia	--	--	1B.1 G4T1/S1	70 m - 810 m Perennial Herb February - September	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found in maritime chaparral, cismontane woodland, and coastal scrub habitats with sandy or gravelly soils. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Isocoma menziesii (H. & A.) G. Nesom var. *decumbens* (Greene) G. Nesom Decumbent goldenbush	--	--	1B.2 G3G5T2T3/S2	10 m - 135 m Shrub April - November	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This taxon is associated with openings in chaparral and coastal scrub with sandy soils and in disturbed areas. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Juglans californica S. Watson Southern California black walnut	--	--	4.2 G3/S3	50 m - 900 m Deciduous Tree March - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found in slopes, canyons, and alluvial substrates in coastal scrub, chaparral, and cismontane woodland. The biolgist did not observe this species during the site visits.

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Harpagonella palmeri A. Gray Palmer's grapplinghook	--	--	4.2 G4/S3	15 m - 955 m Annual Herb March - May	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Chaparral, coastal scrub, valley and foothill grassland; clay soil; open grassy areas within shrubland. The proposed development envelope and fuel modification zone lack suitable habitat elements. There are no occurencies in the Santa Monica Mountains.
Lasthenia glabrata Lindl. ssp. *coulteri* (Gray) Ornduff Coulter's goldfields	--	--	1B.1 G4T2/S2	1 m - 1220 m Annual Herb February - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found in coastal salt marshes and swamps, playas, grasslands, and vernal pools, usually on alkaline soils. The proposed development envelope and fuel modification zone lack suitable habitat elements. It lacks coastal salt marshes, swamps, playas, grasslands, and vernal pools.
Lepechinia fragrans (Greene) Epl. Fragrant pitcher sage	--	--	4.2 G3/S3	20 m - 1310 m Shrub March - October	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with chaparral. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Lepidium virginicum L. var. *robinsonii* (Thell.) Hitchc. Robinson's pepper-grass	--	--	1B.2 G5T3/S3	1 m - 885 m Annual Herb January - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Chaparral and coastal scrub. The proposed development envelope and fuel modification zone lack suitable habitat elements. There are no occurencies in the Santa Monica Mountains.

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Lilium humboldtii Roezl & Leichtlin ssp. *ocellatum* (Kellogg) Thorne Ocellated Humboldt lily	--	--	4.2 G4T3/S3	30 m - 1800 m Perennial Herb (Bulbiferous) March - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with riparian areas in lower montane coniferous forest and coastal chaparral. It typically occurs on lower stream benches but can also occur in rich humus on shaded, dry slopes, beneath a dense coniferous canopy and cismontane oak woodland. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Malacothamnus davidsonii (Rob.) Greene Davidson's bush-mallow	--	--	1B.2 G2/S2	185 m - 855 m Perennial Shrub (Deciduous) June - January	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found in coastal scrub, chaparral, cismontane woodland, and riparian woodland habitats. The property is well outside the known western limit of the taxon's distribution (east of the 405 freeway).
Mobergia calculiformis (W.A. Weber) H. Mayrhofer & Sheard Light gray lichen	--	--	3 G1/S1	-- Crustose Saxicolous Lichen --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE On acidic basalt rocks in association with coastal scrub habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Monardella hypoleuca A. Gray ssp. *hypoleuca* White-veined monardella	--	--	1B.3 G4T2T3/S2S3	50 m - 1525 m Herb April - December	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs in chaparral and cismontane woodland in rich soil of shady canyon bottoms of the southern Santa Monica Mountains, often growing with *Lonicera subspicata*, *Baccharis plummerae*, and *Artemisia douglasiana*. The proposed development envelope and fuel modification zone lack suitable habitat elements; there are no shady canyon bottoms.

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Monardella sinuata Elvin & A.C. Sanders ssp. *sinuata* Southern curly-leaved monardella	--	--	1B.2 G3T2/S2	< 300 m Annual Herb April - September	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs on sandy soil in chaparral, cismontane woodland, coastal dunes, and openings in coastal scrub. In the database search area the species is only known from Ventura County. The proposed development envelope and fuel modification zone lack suitable habitat elements. There are no occurencies in the Santa Monica Mountains.
Nama stenocarpum Gray Mud nama	--	--	2B.2 G4G5/S1S2	5 m - 500 m Annual/Perennial Herb January - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found in muddy margins of freshwater marshes, swamps, lakes, and rivers. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Navarretia ojaiensis Elvin, J.M. Porter & L.M. Johnson Ojai navarretia	--	--	1B.1 G1/S1	275 m - 620 m Annual Herb May - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with openings in chaparral and coastal scrub, and in valley and foothill grassland habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Nolina cismontana Dice Chaparral nolina	--	--	1B.2 G2/S2	140 m - 1275 m Perennial Shrub (Evergreen) March - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found in coastal sage scrub and chaparral habitats on sandstone and gabbro substrates. The proposed development envelope and fuel modification zone lack suitable habitat elements. There are no sandstone or gabrro substrates.

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Orcuttia californica Vasey California Orcutt grass	FE August 1993	SE September 1979	1B.1 G1/S1	15 m - 660 m Annual Herb April - August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found in vernal pools. The proposed development envelope and fuel modification zone lack suitable habitat elements; there are no vernal pools.
Pentachaeta lyonii Gray Lyon's pentachaeta	FE January 1997	SE January 1990	1B.1 G2/S2	30 m - 630 m Annual Herb March - August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs mostly in pocket grassland in chaparral, coastal sage scrub, road/trail edges and sites transitional to shrublands with rocky and clay soils of volcanic origin. It occurs in the central Santa Monica Mountains along the northern slopes, through Thousand Oaks, around the western edge of the Simi Hills to the western edge of City of Simi Valley. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Phacelia hubbyi (J.F. Macbr.) L.M. Garrison Hubby's phacelia	--	--	4.2 G4/S4	0 m - 1000 m Annual Herb April - July	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found on gravelly or rocky slopes in chaparral and grassland. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Phacelia ramosissima var. *austrolitoralis* South coast branching phacelia	--	--	4.2	6 m - 300 m Perennial herb March - August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in sandy, sometimes rocky soil in chaparral, coastal dunes, coastal scrub, and marshes. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Piperia michaelii (Greene) Rydb. Michael's rein orchid	--	--	4.2 G3/S3	3 m - 915 m Perennial Herb April - August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Many habitat associations including foothill woodland, oak woodland, yellow pine forest, closed-cone pine forest, and coastal sage scrub, generally on dry sites. Few records from the Santa Monica Mountains. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Plagiobryoides vinosula (Cardot) J.R. Spence Wine-colored tufa moss	--	--	4.2 G3G4/S2	30 m - 1735 m Moss --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Usually occurs on granitic rock or granitic soil, sometimes clay, along seeps and streams, cismontane woodland, Mojavean desert scrub, meadows and seeps, pinyon and juniper woodland, and riparian woodland. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Pseudognaphalium leucocephalum White rabbit-tobacco	--	--	2B.2 G4/S2	0 m - 2100 m Perennial Herb July - December	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Sandy or gravelly soils in chaparral, coastal scrub, cismontane woodland, riparian woodland. Species is not known to occur in the Santa Monica Mountains.
Quercus dumosa Nutt. Nuttall's scrub oak	--	--	1B.1 G3/S3	15 m - 400 m Shrub February - August	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found on sandy soil and clay loam in closed-cone coniferous forest, chaparral, and coastal scrub. The biologist did not observe this species during the site visit.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (May 2016)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Selaginella cinerascens A. A. Eaton Ashy spike moss	--	--	4.1 G3G4/S3	0 m - 640 m Perennial Rhizomatous Herb N/A	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Dry open places of clay soil, clayey-sandy soil, or in shade under shrubs and trees in chaparral and coastal scrub habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Senecio aphanactis Greene Chaparral ragwort	--	--	2B.2 G3?/S2	15 m - 800 m Annual Herb January - April	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is found on drying alkaline flats within woodland, chaparral, and coastal scrub habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements, soils on property are acidic.
Sidalcea neomexicana Gray Salt spring checkerbloom	--	--	2B.2 G4?/S2S3	15 m -1530 m Perennial Herb March - June	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with mesic chaparral, coastal scrub, low montane coniferous forest, Mojavean desert scrub, and playas on alkaline substrates. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Suaeda esteroa Ferren & Whitmore Estuary seablite	--	--	1B.2 G3/S2	0 m -5 m Perennial Herb May - January	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species occurs in coastal salt marshes and swamps. The proposed development envelope and fuel modification zone lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (May 2016)**			**ELEVATION RANGE, LIFE FORM, & FLOWERING PERIOD**	**OCCURRENCE POTENTIAL (See notes at end of table for sources of information)**
	Federal Status	**State Status**	**CNPS Global Rank/ State Rank**		
Symphyotrichum greatae (Parish) G.L. Nesom Greata's aster	--	--	1B.3 G3/S3	800 m - 1500 m Perennial Herb June - October	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Chaparral, cismontane woodland; mesic canyons. Species is not known to occur in the Santa Monica Mountains.
Texosporium sancti-jacobi (Tuck.) Nadv. ex Tibell & Hoffsten Woven-spored lichen	--	--	3 G3/S1	290 m - 660 m Lichen N/A	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Crustose lichen found on soil, small mammal pellets, dead twigs, and moss ferns (*Selaginella* spp.) in arid to semi-arid grasslands, shrublands, or savannas. Parent materials are noncalcareous. Soils developed on these parent materials vary greatly, from very fine textured soils on basalt to sandy loams, to soils with a very high content of fine or coarse sand. Soil depth varies greatly, from thin soils over bedrock to moderately thick soils but restricted by a caliche layer or deep alluvial soils. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Thelypteris puberula (Baker) C. Morton var. *sonorensis* A.R. Smith Sonoran maiden fern	--	--	2B.2 G5T3/S2	50 m - 610 m Perennial Herb (Rhizomatous) N/A	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with meadows and seeps. The proposed development envelope and fuel modification zone lack suitable habitat elements; there are no meadows or seeps.
Tortula californica Bartr. California screw moss	--	--	1B.2 G2?/S2	10 m - 1460 m Moss N/A	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is associated with sandy soil in chenopod scrub and grassland. The proposed development envelope and fuel modification zone lack suitable habitat elements.

STATUS KEY:

Federal		State		CNPS California Rare Plant Rank
FE:	Federally Endangered	SE:	State Endangered	
FT:	Federally Threatened	ST:	State Threatened	Rank 1A: Plants Presumed Extinct in California
FC:	Federal Candidate Species	SR:	State Rare	Rank 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
		SC:	State Candidate	Rank 2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
				Rank 3: Plants About Which We Need More Information - A Review List
				Rank 4: Plants of Limited Distribution - A Watch List

.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Potential for Occurrence is based on professional experience, what is known about habitat associations and requirements of the species, and known occurrences in the region. Sources of information consisted of the California Natural Diversity Database and California Native Plant Society Inventory of Rare and Endangered Plants.

Present = Detected during site visit, known to occur, or recently reported to occur
Expected = Suitable habitat is present and species known to occur in the immediate vicinity
High Potential = Suitable habitat is present and species is known to occur frequently in the region
Moderate Potential = Suitable habitat is limited and species occurs in the region infrequently
Low Potential = Species-specific survey negative or marginal habitat is present or temporary in nature and species known to occur in the immediate vicinity (potential for occurrence cannot be ruled out)
Not Expected = Suitable habitat and substrate absent and/or area of interest is located outside known geographical and elevation ranges.

Global Rank (G Rank) is a reflection of the overall status of an element throughout its global range. Both Global and State ranks represent a letter and number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two. Taxa that are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies.

GQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
GX = Presumed Extinct - Species not located despite intensive searches and virtually no likelihood of rediscovery. Ecological community or system eliminated throughout its range, with no restoration potential.
GH = Possibly Extinct - Known from only historical occurrences but some hope of rediscovery. Evidence exists that species may be extinct or ecosystem eliminated throughout its range, but not enough to state this with certainty.
G1 = Critically Imperiled - At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled - At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable - At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure - Common; widespread and abundant.
G? = Inexact Numeric Rank
GU = Unrankable
GNR = Unranked
GNA = Not Applicable
C = Captive or Cultivated Only

State Rank (S Rank) is assigned much the same way as the global rank, but state ranks refer to the imperilment status only within California's state boundaries.

SQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
SX = Presumed Extirpated
SH = Possibly Extirpated
S1 = Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled - Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
S3 = Vulnerable - Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer) recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
S4 = Apparently Secure - Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.
S5 = Secure- Common, widespread, and abundant in the state.
S? = Inexact Numeric Rank
SU = Unrankable
SNR = Unranked
SNA = Not Applicable

SCIENTIFIC NAME **COMMON NAME**	**STATUS (November 2015)** **Federal Status**	**State Status**	**CDFW (Season/Region) Global Rank/State Rank LA County (Season/Region)**	**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [1]
INVERTEBRATES				
Helminthoglypta traskii traskii Trask shoulderband	--	--	-- G1G2T1/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs from coastal Ventura County south into Mexico. Preferred habitat is coastal sage scrub and chaparral. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Helminthoglypta tudiculata convicta Southern shoulderband	--	--	-- G2G3/SNR --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in the Transverse & Peninsular ranges and the Los Angeles Basin, in annual grassland, coastal scrub, and riparian habitats under rock, leaf litter, decaying yucca, & woody debris. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Haplotrema caelatum Slotted lancetooth	--	--	-- G1/SNR --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Known from Santa Barbara, Ventura, Los Angeles, San Diego, and Ventura Counties in palustrine habitat. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Tryonia imitator Mimic tryonia (=California brackishwater snail)	--	--	-- G2/S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs along the coast from just north of San Francisco to Ensenada, Mexico in brackish salt marshes and estuarine habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.

[1] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*

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Socalchemmis gertschi Gertsch's socalchemmis spider	--	--	-- G1/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE LOW POTENTIAL IN FUEL MODIFICATION ZONE Occurs in sage scrub, chaparral, oak woodland, coniferous forest, generally in rocky outcrops or talus slope. The proposed development envelope lacks suitable habitat elements. The proposed fuel modification zone consists of marginally suitable habitat elements.
Streptocephalus woottoni Riverside fairy shrimp	FE August 1993	--	-- G1G2/S1S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is only found in deep, cool lowland vernal pools that retain water through the warmer weather of late spring and in ditches and road ruts. There are no vernal pools on or adjacent the property.
Trimerotropis occidentiloides Santa Monica grasshopper	--	--	-- G1G2/S1S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE LOW POTENTIAL IN FUEL MODIFICATION ZONE Occurs on bare hillsides and along dirt trails in chaparral. The proposed development envelope lacks suitable habitat elements. The proposed fuel modification zone consists of marginally suitable habitat elements.
Aglaothorax longipennis Santa Monica shieldback katydid	--	--	-- G1G2/S1S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE LOW POTENTIAL IN FUEL MODIFICATION ZONE Occurs in the Santa Monica Mountains in chaparral and stream bottom vegetation. The proposed development envelope lacks suitable habitat elements. The proposed fuel modification zone consists of marginally suitable habitat elements.

SCIENTIFIC NAME COMMON NAME	STATUS (November 2015)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY [1]
	Federal Status	State Status	CDFW (Season/Region) Global Rank/State Rank LA County (Season/Region)	
Cicindela hirticollis gravida Sandy beach tiger beetle	--	--	-- G5T2/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Coastal from north of San Francisco into Mexico in moist sand in swales, behind dunes, or upper beaches beyond normal high tides. Most common March through June and August through September. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Cicindela senilis frosti Senile tiger beetle	--	--	-- G2G3T1T3/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in coastal salt marsh, tidal mud flats, and interior alkali mud flats. Adults active February - June and August - October. They overwinter in shallow underground galleries, usually under flat rocks at edge of habitat. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Cicindela gabbii Western tidal-flat tiger beetle	--	--	-- G2G4/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE It occurs coastal habitats including salt marshes, tidal flats, and beaches from Ventura County into Baja California in dark mud of upper mudflats and salt-pannes. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Coelus globosus Globose dune beetle	--	--	-- G1G2/S1S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Inhabits foredunes, sand hummocks, and backdunes from Bodega Bay, south, and some Channel Islands. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Carolella busckana Busck's gallmoth	--	--	-- G1G3/SH --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in conifer forests. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Danaus plexippus Monarch butterfly (Overwintering Population)	--	--	-- G5/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Critical features of winter sites are conifer and eucalyptus groves. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Euphydryas editha quino Quino checkerspot butterfly	FE January 1997	--	-- G5T1T2/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Now restricted to western Riverside County and San Diego County. Occurs in coastal sage scrub, chaparral, and valley grasslands. Adults typically fly late February into April, sometimes May. The proposed development envelope and fuel modification zone lack suitable habitat elements. The property is also located well outside the species current range.
Panoquina errans Wandering (=saltmarsh) skipper	--	--	-- G4G5/S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in central California and along the coast from Santa Barbara County south, in salt marshes near beaches and river mouths in stands of *Distichlis spicata*. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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FISH				
Oncorhynchus mykiss irideus Southern steelhead	FE August 1997	--	SSC G5T3Q/S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Young hatch and typically remain in fresh water for 1 - 3 years then swim to the ocean, staying 1 - 2 years before returning to their native streams. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.
Gila orcutti Arroyo chub	--	--	SSC G2/S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita rivers, and Malibu and San Juan creeks and introduced to other rivers and creeks. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.
Catostomus santaanae Santa Ana sucker	FT May 2000	--	SSC G1/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This species is endemic to Los Angeles Basin south coastal streams. It requires permanent flowing streams. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.

[2] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*

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Gasterosteus aculeatus williamsoni Unarmored threespine stickleback	FE October 1970	SE June 1971	FP G5T1/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Restricted to the Santa Clara River and San Antonio Creek (Santa Barbara County). Requires clear, flowing, well-oxygenated water with pools, eddies, and dense vegetation or debris for cover and food supply. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.
Eucyclogobius newberryi Tidewater goby	FE February 1994	--	SSC G3/S2S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in cool brackish water of lagoons; favoring salinities less than 10 ppt. Favorable habitat includes shallow open water with emergent vegetation. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.

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REPTILES				
Actinemys pallida Southern Western pond turtle	--	--	SSC G3G4/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Associated with permanent or nearly permanent water bodies. May be active year-round. Most often seen basking above the water line. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.
Phrynosoma blainvillii Coast horned lizard	--	--	SSC G3G4/S3S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE The species occurs throughout the foothills and coastal plains from Los Angeles area to northern Baja California. It frequents areas with open vegetation such as chaparral or coastal sage scrub. The proposed development envelope and fuel modification zone lack suitable habitat elements. The biologist did not observe this species during the site visit but it is very cryptic.
Aspidoscelis tigris stejnegeri San Diegan tiger whiptail	--	--	-- G5T3T4/S2S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE LOW POTENTIAL IN FUEL MODIFICATION ZONE Occurs in valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, mixed conifer, pine-juniper, chaparal, desert scrub, desert wash, alkali scrub, and annual grassland. The proposed development envelope lacks suitable habitat elements. The fuel modification zone consists of marginally suitable habitat elements; however, the biologist did not observe this species during the site visit.

[3] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*

SCIENTIFIC NAME **COMMON NAME**	**STATUS (November 2015)** **Federal Status**	**State Status**	**CDFW (Season/Region) Global Rank/State Rank LA County (Season/Region)**	**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY [3]**
Anniella stebbensi Southern California legless lizard	--	--	SSC G3G4T3T4Q/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in sparsely vegetated areas of dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks in loose soil and leaf litter. Lives mostly underground. Most active during the morning and evening. The proposed development envelope and fuel modification zone lack suitable habitat elements. Areas in and around Dry Canyon Creek are suitable for this species.
Salvadora hexalepis virgultea Coast patch-nosed snake	--	--	SSC G5T4/S2S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs from San Luis Obispo County, south through the coastal zone, south and west of the deserts, into coastal northern Baja California in semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. The proposed development envelope and fuel modification zone lack suitable habitat elements. Areas in and around Dry Canyon Creek are suitable for this species.
Diadophis punctatus modestus San Bernardino ringneck snake	--	--	-- G5T2T3Q/S2? --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This small snake is found in a variety of habitats throughout the state including annual grassland and chaparral. It is usually found under the cover of rocks, wood, bark, boards and other surface debris, but occasionally seen moving on the surface on cloudy days, at dusk, or at night. The proposed development envelope and fuel modification zone lack suitable habitat elements. Areas in and around Dry Canyon Creek are suitable for this species.

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Lampropeltis zonata pulchra San Diego mountain kingsnake	--	--	SSC G4G5/S1S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Common in the vicinity of rocks or boulders near streams or lakeshores. May also utilize rotting logs and seek cover under dense shrubs. The proposed development envelope and fuel modification zone lack suitable habitat elements. Areas in and around Dry Canyon Creek are suitable for this species.
Thamnophis hammondii Two-striped garter snake	--	--	SSC G4/S3S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs from Monterey County west of the Coast Ranges south through the Transverse and Peninsular ranges into Mexico. Primarily aquatic; however, the biologist has observed it some distance from water in the Simi Valley area. The proposed development envelope and fuel modification zone lack suitable habitat elements. Areas in and around Dry Canyon Creek are suitable for this species.
Thamnophis sirtalis ssp. South coast garter snake	--	--	SSC (From Ventura to San Diego) G5T1T2/S1S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE LOW POTENTIAL IN FUEL MODIFICATION ZONE Absent only from Alpine Co. southward (east of the Sierra crest), the southern desert regions, and coastally from northern San Diego Co. south to the Mexican border. Associated with permanent or semi-permanent bodies of water. The proposed development envelope and fuel modification zone lack suitable habitat elements. Areas in and around Dry Canyon Creek are suitable for this species.

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AMPHIBIANS				
Anaxyrus californicus Arroyo toad	FE August 1995	--	SSC G2G3/S2S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in washes, arroyos and riparian areas with willows, sycamores, oaks, and cottonwoods along exposed sandy substrates. Tadpoles sift fine sediments for food and are extremely dependant on this specialized habitat. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.
Rana aurora draytonii California red-legged frog	FT May 1996	--	SSC G2G3/S2S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in a variety of habitat types, including aquatic, riparian, and upland habitats. They prefer slow moving or deep standing ponds, pools, and streams. They are active all year but will in dry years estivate in moist refuges until the late fall rains. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.
Rana mucosa Mountain yellow-legged frog	FE April 2013 (San Gabriel, San Jacinto, & San Bernardino Mountains).	SE August 2002	SSC G1/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Ponds, lakes and streams at moderate to high elevations. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.

[4] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*

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Taricha torosa torosa Coast Range newt	--	--	SSC (Monterey County to South) G4/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in wet valley-foothill hardwood, hardwood-conifer, mixed conifer, oak woodlands, coastal scrub, chaparral, and annual grasslands. They summer in moist habitats under woody debris, or in rock crevices and animal burrows. Adults migrate in large numbers from terrestrial locations to ponds, reservoirs, and sluggish pools in streams to breed. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is not suitable for this species.
Spea hammondii Western spadefoot	--	--	SSC G3/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in grasslands, chaparral, and pine-oak woodlands preferring open areas with sandy or gravelly soils. Species requires vernal or pools of intermittent streams for breeding. They are typically active October to May. Breeding occurs January - May, 1 - 2 days after heavy rains. The proposed development envelope and fuel modification zone lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (November 2015)** **Federal Status**	**State Status**	**CDFW (Season) Global Rank/State Rank LA County (Season/Region)**	**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
BIRDS				
Anser albifrons frontalis Greater white-fronted goose	--	--	-- G5T3/S2S3 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE One of two subspecies that breed in Alaska and winter primarily in California. The other subspecies is the Tule greater white-fronted goose (A. a. gambelli). It frequents open water or unvegetated shorelines for roosting and nearby post-harvest grain fields for foraging. Its primary wintering areas include the Sacramento Valley and the Sacramento San Joaquin River Delta. These areas receive the majority of fall migrants, beginning in late September, peaking by early to mid-November. Some winter in the northern highlands of Mexico Individuals or small flocks may occur now and then at parks & golf courses within the county. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Chen caerulescens Snow goose	--	--	-- G5/SNR LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE An abundant winter resident found primarily in the Central Valley. Preferred habitats are fresh emergent wetlands, adjacent lacustrine waters, and nearby wet croplands, pastures, meadows, and grasslands. Occasionally found in brackish emergent wetlands and adjacent estuarine waters. Rare along the Coast Ranges and immediate coast but regular in southern California. It generally com-mute between evening roosts in tidal marshes or river deltas and diurnal feeding areas on agricultural stubble and pasture. The proposed development envelope and fuel modification zone lack suitable habitat elements.

[5] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*

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Branta bernicla Brant	--	--	SSC (Winter & Staging) G5/S2? LA County SBS (Wintering)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Locally common winter resident (October or November to May) along the California coast. It is found in large, shallow estuaries with eelgrass beds, primarily in Humboldt, Tomales, Morro, and San Diego bays, San Diego River mouth, and Drake's Estero, and also in nearby marine waters. Fewer are found on smaller estuaries with sandy or muddy bottoms. Stragglers remain through July. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Dendrocygna bicolor Fulvous whistling-duck	--	--	SSC (Nesting) G5/S1 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Nests irregularly in California in the Imperial Valley in dense wetlands of cattails along the south end of the Salton Sea. It is found in fresh emergent wetlands, shallow lacustrine and quiet riverine waters; it also feeds in wet croplands and pastures. Fairly common (but declining) in the Imperial Valley March to August and sporadic through winter. Elsewhere in California, it is rare and irregular, with most records from the San Joaquin Valley. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Aythya americana Redhead	--	--	SSC (Nesting) G5/S3S4 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE From October to March, it is uncommon to locally common south from Modoc to Mono County in lacustrine waters. Also found in the Central Valley, the central valley California foothills, coastal lowlands, and along the coast from Monterey county south, and along the Colorado river. Nests in fresh emergent wetland bordering open water. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Gavia immer Common loon	--	--	SSC (Nesting) G5/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE In summer, rare along northern California coast. From September to May, fairly common in estuarine and subtidal marine habitats along entire coast, and uncommon on large, deep lakes in valleys and foothills throughout state. Common migrant along coast, including offshore, in November and May. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Podiceps nigricollis Eared grebe	--	--	-- G5/SNR LA County (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A common winter resident in many aquatic habitats throughout California. Nests locally, and irregularly, in small numbers in marshy estuarine habitats of southern California. During migration, fairly common in marine pelagic waters. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Phalacrocorax auritus Double-crested cormorant	--	--	WL (Nesting Colony) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A yearlong resident along the entire coast of California and on inland lakes, in fresh, salt and estuarine waters. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Pelecanus occidentalis californicus California brown pelican	Delisted December 2009 FE February 2008 FE October 1970	Delisted June 2009 SE June 1971	FP (Nesting Colony & Communal Roosts) G4T3/S1S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Estuarine, marine sub tidal, and marine pelagic waters along the California coast. Feeds on fish and occasionally on crustaceans, carrion, and young of its own species. Requires islands for nesting. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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	Federal Status	State Status	CDFW (Season) Global Rank/State Rank LA County (Season/Region)	
Botaurus lentiginosus American bittern	--	--	-- G4/S3S4 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Distributed widely in winter in fresh emergent wetlands, primarily west of the Sierra Nevada. Less common on coastal slope, Rare August to May in saline emergent wetlands along coast. Elsewhere in lowlands, a rare transient and local winter resident. No longer breeds regularly south of Monterey County The proposed development envelope and fuel modification zone lack suitable habitat elements.
Ixobrychus exilis Least bittern	--	--	SSC (Nesting) G5/S2 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE In southern California, common summer resident (especially April to September), at Salton Sea and Colorado River, in dense emergent wetlands near sources of freshwater, and in desert riparian (saltcedar scrub). Probably nests only in emergent wetlands. In deserts and coastal lowlands, quite rare, but breeds locally in the Owens Valley and Mojave Desert. Rare to uncommon April to September in large, fresh emergent wetlands of cattails and tules in San Diego county, and the Sacramento and San Joaquin Valleys, and where it nests. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Ardea Herodias Great blue heron	--	--	-- (Nesting Colony) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills. This species nest regularly at Malibu Creek just north of Cross Creek Bridge. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Egretta thula Snowy egret	--	--	-- (Nesting Colony) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. Common September to April in coastal lowlands, but rare through summer. Nests regularly at Malibu Country Mart near Malibu Lagoon. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Ardea alba Great egret	--	--	-- (Nesting Colony) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT Common yearlong resident throughout California, except for high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures. Nests and roosts in large trees. Nests regularly at Malibu Country Mart near Malibu Lagoon. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Nycticorax nycticorax Black-crowned night-heron	--	--	-- (Nesting Colony) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT Fairly common, yearlong resident in lowlands and foothills throughout most of California. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and, rarely, on kelp beds in marine subtidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands. Nests regularly at Malibu Country Mart near Malibu Lagoon. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Plegadis chihi White-faced ibis	--	--	WL (Nesting Colony) G5/S3S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Uncommon summer resident in parts of southern California. It prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland. This species no longer breeds regularly in California. Local winter visitor along the coast. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Cathartes aura Turkey vulture	--	--	-- G5/SNR LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE MAY FORAGE/FLY OVER PROPERTY Common in breeding season throughout most of California. Absent to uncommon in most of state in winter, with greatest concentrations in coastal regions. Not found at highest elevations in Sierra Nevada. Occurs in open stages of most habitats that provide adequate cliffs or large trees for nesting, roosting, and resting. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Gymnigyps californianus California condor	FE March 1967	SE June 1971	FP G1/S1 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Permanent resident of the semi-arid, rugged mountain ranges surrounding the southern San Joaquin Valley, including the Coast Ranges from Santa Clara Co. south to Los Angeles Co., the Transverse Ranges, Tehachapi Mts., and southern Sierra Nevada. Forages over wide areas of open rangelands, roosts on cliffs and in large trees and snags. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Pandion haliaetus Osprey	--	--	WL (Nesting) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. Breeds in northern California from Cascade ranges south to Lake Tahoe, and along the coast south to Marin Co. Regular breeding sites include Shasta Lake, Eagle Lake, Lake Almanor, other inland lakes and reservoirs, and northwest river systems. An uncommon breeder along southern Colorado River, and uncommon winter visitor along the coast of southern California. Regularly observed at Malibu Lagoon during winter. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Elanus leucurus White-tailed kite	--	--	FP (Nesting) G5/S3 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT Inhabits grassland, pastures and other herbaceous habitat mostly in cismontane California. For breeding, requires dense clumps of trees or tall shrubs, surrounded by grassland and other open habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Aquila chrysaetos Golden eagle	--	--	FP/WL (Nesting) G5/S3 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT Rolling foothills, mountain areas, sage-juniper flats, and desert habitats with secluded cliffs and overhanging ledges and large trees used for cover. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Haliaeetus leucocephalus Bald eagle	Delisted August 2007 FT (Rev.) August 1995 FE (Rev.) March 1978 FE March 1967	SE (Rev.) October 1980 SE June 1971	FP (Nesting & Wintering) G5/S2 LA County SBS (Wintering)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Permanent resident, and uncommon winter migrant, now restricted to breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity cos. About half of the wintering population is in the Klamath Basin. More common at lower elevations; not found in the high Sierra Nevada. Fairly common as a local winter migrant at a few favored inland waters in southern California. Largest numbers occur at Big Bear Lake, Cachuma Lake, Lake Mathews, Nacimiento Reservoir, San Antonio Reservoir, and along the Colorado River. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Circus cyaneus Northern harrier	--	--	SSC (Nesting) G5/S3 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Frequents meadows, grasslands, open rangelands, desert sinks, and both fresh and saltwater wetlands. More widespread in winter, foraging in sparse scrub and agricultural areas including fallow fields. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Accipiter striatus Sharp-shinned hawk	--	--	WL (Nesting) G5/S4 --	MAY FORAGE/FLY OVER PROPERTY DURING MIGRATION & WINTER Winter resident. They breed in coniferous or mixed woodlands and are often found in woodlots, towns, and parks in winter. Species does not nest in Southern California.

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Accipiter cooperii Cooper's hawk	--	--	WL (Nesting) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT MAY FORAGE/FLY OVER PROPERTY Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. Nests in deciduous trees in crotches 3-23 m (10-80 ft), but usually 6-15 m (20-50 ft), above the ground. Also nests in conifers on horizontal branches, in the main crotch, often just below the lowest live limbs. Usually nests in second-growth conifer stands, or in deciduous riparian areas, usually near streams. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek is suitable for this species. The biologist has observed this species on Sequit Drive (road kill).
Accipiter gentilis Northern goshawk	--	--	SSC (Nesting) G5/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Breeds in North Coast Ranges through Sierra Nevada, Klamath, Cascade, and Warner Mts., in Mt. Pinos and San Jacinto, San Bernardino, and White Mts. Remains yearlong in breeding areas as an uncommon resident. Prefers middle and higher elevations, and mature, dense conifer forests. Casual in winter along north coast, throughout foothills, and in northern deserts, where it may be found in pinyon-juniper and low-elevation riparian habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Parabuteo unicictus Harris's hawk	--	--	WL (Nesting) G5/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Historically occurred year-round in the Lower Colorado River Valley from near Needles to the Imperial National Wildlife Refuge, with a small disjunct breeding population at the south end of the Salton Sea. Mostly extirpated in the 1960's. Now a rare yearlong resident of southern Salton Sea and Imperial valley. Inhabits semiopen desert scrub, desert wash, and desert riparian habitats for nesting and foraging. Needs scattered small trees or saguaro cactuses for hunting perches and nest structures. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Buteo swainsoni Swainson's hawk	--	ST April 1983	-- (Nesting) G5/S3 LA County SBS (Breeding)	MAY FORAGE OVER PROPERTY DURING MIGRATION Breeds in isolated stands of trees in juniper-sage flats, riparian areas, and in oak savannah, forages in grasslands, suitable grain fields, alfalfa fields, and livestock pastures. The only known nest sites in southern California are within the Antelope Valley. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Buteo regalis Ferruginous hawk	--	--	WL (Wintering) G4/S3S4 LA County SBS	MAY FORAGE OVER PROPERTY DURING MIGRATION & WINTER Winter resident. Frequents grasslands and agricultural areas. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Falco columbaris Merlin	--	--	WL (Wintering) G5/S3S4 --	MAY FORAGE/FLY OVER PROPERTY DURING MIGRATION & WINTER Uncommon winter migrant from September to May. Seldom found in heavily wooded areas, or open deserts. Frequents coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, and early successional stages. Ranges from annual grasslands to ponderosa pine and montane hardwood-conifer habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Falco mexicanus Prairie falcon	--	--	WL (Nesting) G5/S4 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT Uncommon permanent resident that ranges from southeastern deserts northwest throughout the Central Valley and along the inner Coast Ranges and Sierra Nevada. Distributed from annual grasslands to alpine meadows, but associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas but nesting is generally confined to sheltered cliff ledges, potholes, and caves in rugged terrain. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Falco peregrinus anatum Peregrine falcon	Delisted August 1999 FE June 1970	Delisted November 2009 SE June 1971	FP (Nesting) G4T4/S3S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT Breeds mostly in woodland, forest, and coastal habitats. Migrants occur along the coast in spring and fall. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Porzana carolina Sora	--	--	-- G5/SNR LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Frequents saline emergent wetlands in the nonbreeding season. Probably breeds regularly in southern California. Historical nesting localities include Big Bear Lake in the San Bernardino Mts. and the Owens Valley, Inyo Co. There are a few summer records from the Salton Sea district and along the coastal lowlands. In winter, northern and high-elevation populations migrate southward. Widespread along the southern California coast in winter, as well as at the Salton Sea and the Colorado River, and visitors occasionally reach the Channel Islands. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Laterallus jamaicensis coturniculus California black rail	--	ST June 1971	FP G3G4T1/S1 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE It occurs in tidal emergent wetlands dominated by pickleweed, or in brackish marshes supporting bulrushes in association with pickleweed. In freshwater, usually found in bulrushes, cattails, and saltgrass. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Rallus longirostris obsoletus California clapper rail	FE October 1970	SE June 1971	-- G5T1/S1 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Locally common yearlong in coastal wetlands and brackish areas around San Francisco, Monterey, and Morro bays. Prefers emergent wetland dominated by pickleweed and cordgrass, and brackish emergent wetland dominated by bulrush. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water. Does not occur in the region.
Rallus longirostris levipes Light-footed clapper rail	FE October 1970	SE June 1971	FP G5T1T2/S1 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Requires emergent or brackish emergent wetlands and tidal sloughs dominated by pickleweed, cord grass and bulrush. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Rallus longirostris yumanensis Yuma clapper rail	FE March 1967	ST February 1978 SE June 1971	-- G5T3/S1 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE In coastal saline emergent wetlands along southern California from Santa Barbara Co. to San Diego Co.Prefers emergent wetland dominated by pickleweed and cordgrass, and brackish emergent wetland dominated by bulrush. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Rallus limicola Virginia Rail	--	--	-- G5/SNR LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A fairly common resident in California. In summer, breeds in fresh emergent wetlands and wet meadows the length of the state. Feeds in tall, emergent vegetation by probing in mud and wading in shallow water. Nests in cattails, bulrushes, and other emergent vegetation in freshwater marshes. Areas may be quite small, but must have some open water and tall, emergent vegetation to support a nesting pair. Nests on the ground, hidden by vegetation, suspended between stems above water, or perched on grass tussocks. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Grus canadensis canadensis Lesser sandhill crane	--	--	SSC (Wintering) G5T4/S3S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Concentrates on the Carrizo Plain with smaller flocks near Brawley and Blythe. Outside of known wintering grounds, extremely rare except that migrates over much of interior California. A few coastal sightings from Marin Co. southward. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Grus canadensis tabida Greater sandhill crane	--	ST April 1983	FP (Nesting & Wintering) G5T4/S2 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Historically, a fairly common breeder on northeastern plateau. Now reduced greatly in numbers, and breeds only in Siskiyou, Modoc and Lassen cos. and in Sierra Valley, Plumas and Sierra cos. In summer, it occurs in and near wet meadow, shallow lacustrine, and fresh emergent wetland habitats. It winters primarily in the Sacramento and San Joaquin valleys from Tehama Co. south to Kings Co., where it frequents annual and perennial grassland habitats, moist croplands with rice or corn stubble, and open, emergent wetlands. It prefers relatively treeless plains. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Charadrius alexandrinus nivosus Western snowy plover	FT April 1993	--	SSC (Nesting) G3T3/S2 LA County SBS (Coastal & Inland)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Primarily occurs and nests on coastal beaches, sand spits, dune-backed beaches, sparse dunes, beaches at creek and river mouths, saltpans at lagoons and estuaries. Less commonly, on bluff-backed beaches, dredged material disposal sites, salt pond levees, dry salt ponds, and river bars. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Charadrius montanus Mountain plover	--	--	-- (Wintering) G3/S2? LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Population declining and very local; occasionally fairly common. Winter resident from September through March. Found on short grasslands and plowed fields of the Central Valley from Sutter and Yuba cos. southward. Also found in foothill valleys west of San Joaquin Valley, Imperial Valley, plowed fields of Los Angeles and western San Bernardino counties, and the central Colorado river valley. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Haematopus bachmani Black oystercatcher	--	--	-- (Nesting) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A permanent resident on rocky shores of marine habitats along almost the entire California coast, and on adjacent islands. Uncommon to locally fairly common in northern and central California and on Channel Islands. Rare on mainland coast south of Pt. Conception (Santa Barbara Co.). Breeds on undisturbed, rocky, open ocean shores. Nesting ledges must be available beyond the reach of ocean waves, and inaccessible to terrestrial predators. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Numenius americanus Long-billed curlew	--	--	WL (Nesting Colony) G5/S2 LA County SBS (Wintering)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE An uncommon to fairly common breeder from April to September in wet meadow habitat in northeastern California in Siskiyou, Modoc, and Lassen cos. Breeds on grazed, mixed-grass and shortgrass prairies. Uncommon to locally very common as a winter visitor from early July to early April along most of the California coast. Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Larus californicus California gull	--	--	WL (Nesting Colony) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE It is abundant in coastal and interior lowlands in nonbreeding season. In April, begins to depart for breeding grounds. Nests on islands in alkali or freshwater lakes and salt ponds in the northeastern plateau region and at Mono Lake. In late summer, migrates westward across the Sierra Nevada from interior nesting grounds to winter in California and the Pacific Northwest. Preferred habitats along the coast are sandy beaches, mudflats, rocky intertidal, and pelagic areas of marine and estuarine habitats, as well as fresh and saline emergent wetlands. Inland, it frequents lacustrine, riverine, and cropland habitats, landfill dumps, and open lawns in cities. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Sterna forsteri Forster's tern	--	--	-- (Nesting Colony) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Common to abundant along the coast of California in marine subtidal and estuarine waters from May to September. Also common to uncommon inland at open lacustrine and riverine habitats. Uncommon along the coast north of Sonoma Co. Nests on salt-pond levees and low islands in emergent wetlands and bays, on open to fairly open levees. Also uses matted reedbeds, sometimes floating. There is a southward migratory movement in fall, with most of the northern California population wintering from southern California south to South America. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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	Federal Status	State Status	CDFW (Season) Global Rank/State Rank LA County (Season/Region)	
Hydroprogne caspia Caspian tern	--	--	-- (Nesting Colony) G5/S4 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Common along the California coast and at scattered locations inland, from April through early August. Adults often fly substantial distances to forage in lacustrine, riverine, and fresh and saline emergent wetland habitats. Nests in dense colonies on sandy estuarine shores, on levees in salt ponds, and on islands in alkali and freshwater lakes. A few individuals nest along the coast and within the county at Port of Los Angeles and Port of Long Beach. Winters from southern California, where it is locally fairly common, south to Central and South America. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Thalasseus maximus Royal tern			-- G5/SNR LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Fairly common, but localized winter visitor to offshore waters and coast of southern California, north to San Luis Obispo County but extremely rare north of this region and the North American interior. Feeds over pelagic waters; less commonly inshore. Roosts on tidal flats and beaches. A few individuals nest along the coast and within the county at Port of Los Angeles and Port of Long Beach. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Thalasseus elegans Elegant tern			WL (Nesting Colony) G2/S2 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Breeding individuals arrive in coastal southen California in early March and are augmented with post-breeders from Mexico in June. Becomes common by July. Most depart by October. Preferred habitats are inshore coastal waters, bays, estuaries, and harbors; rarely occurs far offshore, and never inland. Thousands of individuals nest within the county at Port of Los Angeles and Port of Long Beach but their colonies are threatened. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Rynchops niger Black skimmer			SSC (Nesting Colony) G5/S2 LA County (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A fairly common summer resident at the Salton Sea. Usually arrives by late April and departs by October, breeding in most recent years. Increasingly frequent visitor to coastal estuaries and river mouths of southern California, and accidental at a few other interior locations. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Sterna antillarum browni California least tern	FE October 1970	SE June 1971	FP (Nesting Colony) G4T2T3Q/S2S3 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A summer resident, it arrives at breeding grounds along marine and estuarine shores late April in southern California. Feeds in shallow estuaries or lagoons where small fish are abundant. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT November 2014	SE March 1988 ST June 1971	-- (Nesting) G5T3Q/S1 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Nearly extirpated in southern California, now a rare summer resident of extensive valley, foothill and desert riparian habitats along river bottoms. Requires densely foliaged deciduous trees and shrubs, especially willows, for nesting and mature cottonwoods for foraging. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Geococcyx californianus Greater roadrunner	--	--	-- G5/SNR LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT A yearlong resident in arid, brushy habitats below about 900 m (3000 ft) in coast ranges, foothills and valleys. Fairly common in all desert habitats. Uncommon in a variety of other habitats. Most numerous in open areas with scattered bushes or thickets, or in chaparral edging on sparsely vegetated grassland. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank LA County (Season/Region)**	
Asio otis Long-eared owl	--	--	SSC (Nesting) G5/S3? LA County SBS (Wintering & Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES ABSENT MAY FORAGE/FLY OVER PROPERTY Occurs in the state year round, although seasonal status varies regionally; breeds from February through July. Uncommon yearlong resident throughout the state except the Central Valley and Southern California deserts where it is an uncommon winter visitor. Riparian habitat required; also uses live oak thickets and other dense stands of trees. It occurs along the Santa Clara River (Pers. Obs.) and presumed to breed there. Also known to nest in Big Tujunga Wash The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek consists of marginally suitable habitat for this species.
Asio flammeus Short-eared owl	--	--	SSC (Nesting) G5/S3 LA County SBS	MAY FORAGE/FLY OVER PROPERTY DURING MIGRATION & WINTER A rare winter resident found in open areas with few trees, such as annual and non-native grasslands, irrigated pasture, and both estuarine and freshwater emergent wetlands. Known to occur at Ballona Wetlands and the Santa Clara River (Pers. Obs.) during winter. Does not nest in Southern California. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Athene cunicularia hypugea Western burrowing owl	--	--	SSC (Burrow Sites & Winter Sites) G4/S3 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Year-round resident throughout much of the state in open dry grassland and desert habitats, and in forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Breeding season is March to August, but can begin February and extend into December. Usually nests in mammal burrows that they modify. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Strix occidentalis occidentalis California spotted owl	--	--	SSC G3T3/S3 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE An uncommon, permanent resident in suitable habitat. In southern California, nearly always associated with oak and oak-conifer habitats. Breeding range extends west of the Cascade Range through the North Coast Ranges, the Sierra Nevada, and in more localized areas of the Transverse and Peninsular Ranges. May move downslope in winter along the eastern and western slopes of the Sierra Nevada, and in other areas. Uses dense, multi-layered canopy cover for roost seclusion. Usually nests in tree or snag cavity, or in broken top of large tree. Less frequently nests in large mistletoe clump, abandoned raptor or raven nest, in cave or crevice, on cliff or ground. Does not occur in the Santa Monica Mountains. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Chordeiles acutipennis Lesser nighthawk	--	--	-- G5/SNR LA County SBS (Coastal Slope)	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL NEST SITES PRESENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES PRESENT An uncommon summer resident in arid lowlands, primarily in desert scrub, desert succulent shrub, desert wash, and alkali desert scrub habitats. More common in desert areas of southeastern California. Also forages over grasslands, desert riparian, and other habitats with high densities of flying insects. Nests on the ground typically on alluvian fans characterized by sparse vegetation. Nests have been documented on the Santa Clara River (Per. Obs.), Castaic Creek (Pers. Obs.), San Francisquito Creek (Pers. Obs.), Big Tujunga Wash, San Gabriel River upstream of the Santa Fe Dam, and at San Antonio Wash upstream of Arrow Highway. Casual in winter. Transients sometimes noted on the Channel Islands in spring and summer. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Chaetura vauxi Vaux's swift	--	--	SSC (Nesting) G5/S2S3 --	MAY FORAGE OVER PROPERTY DURING MIGRATION A summer resident of northern California. Breeds fairly commonly in the Coast Ranges from Sonoma Co. north, and very locally south to Santa Cruz Co.; in the Sierra Nevada; and possibly in the Cascade Range. Prefers redwood and Douglas fir habitats with nest-sites in large hollow trees and snags, especially tall, burned-out stubs. Fairly common migrant throughout most of the state in April and May, and August and September. A few winter irregularly in southern coastal lowlands.

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Cypseloides niger Black swift	--	--	SSC (Nesting) G4/S2 LA County SBS (Breeding)	MAY FORAGE OVER PROPERTY DURING MIGRATION Breeds very locally in the Sierra Nevada and Cascade Range, the San Gabriel, San Bernardino, and San Jacinto Mts., and in coastal bluffs and mountains from San Mateo Co. south probably to San Luis Obispo Co. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Calypte costae Costa's hummingbird	--	--	-- (Nesting) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE – POTENTIAL NEST SITES ABSENT LOW POTENTIAL IN FUEL MODIFICATION ZONE – POTENTIAL NEST SITES LIMITED Common in summer and uncommon in winter. Most common and widespread in southern California, but also breeds locally along the western edge of the San Joaquin Valley and the eastern edge of the Sierra Nevada north through Inyo Co. In winter, largely restricted to the southern coast, but also winters on southern deserts. Primary habitats are desert wash, edges of desert riparian and valley foothill riparian, coastal scrub, desert scrub, desert succulent shrub, lower-elevation chaparral, and palm oasis. The proposed development envelope lacks suitable habitat elements. The fuel modification zone consists of marginally suitable habitat elements. Potential nest sites are very limited. Dry Canyon Creek is suitable.
Selasphorus rufus Rufous hummingbird	--	--	-- (Nesting) G5/S1S2 --	MAY OCCUR DURING MIGRATION & WINTER A rare, but regular, winter resident in southern California. Found in a wide variety of habitats that provide nectar-producing flowers; uses valley foothill hardwood, valley foothill hardwood-conifer, riparian, and chaparral habitats during migration; montane riparian, aspen, and high mountain meadows to treeline and above.

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Selasphorus sasin Allen's hummingbird	--	--	-- (Nesting) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE – POTENTIAL NEST SITES ABSENT LOW POTENTIAL IN FUEL MODIFICATION ZONE - POTENTIAL NEST SITES LIMITED A common summer resident (January to July) and migrant along most of the California coast. Breeders are most common in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats, but also are common in closed-cone pine-cypress, urban, and redwood habitats. Occurs in a variety of woodland and scrub habitats as a migrant. Although mostly coastal in migration, fairly common in southern mountains in summer and fall migration. The proposed development envelope lacks suitable habitat elements. The fuel modification zone consists of marginally suitable habitat elements. Potential nest sites are very limited. Dry Canyon Creek is suitable.
Megaceryle alcyon Belted kingfisher	--	--	-- G5/SNR LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Though widespread throughoutNorth America and readily seen during the winter in Los Angeles County, it is seldom encountered along our local rivers during the breeding season. Because they require earthen riverbanks in which to excavate nest burrows and appear to prefer nest sites that are within close proximity to foraging sites, the loss of unpaved riverbank greatly constrains this species' ability to breed within the county. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Picoides nuttallii Nuttall's woodpecker	--	--	-- (Nesting) G4G5/S4S5 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A common, permanent resident of low-elevation riparian deciduous and oak habitats. Occurs in the Central Valley, Transverse and Peninsular Ranges, in the Coast Ranges north to Sonoma Co. and rarely to Humboldt Co., and in lower portions of the Cascade Range and Sierra Nevada. Occurs as a vagrant in the Owens Valley. Forages mostly in oak and riparian deciduous habitats. Pecks, probes, drills for sap, and gleans from trunks, branches, twigs and foliage. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Picoides villosus Hairy woodpecker	--	--	-- G5/SNR LA County SBS (Lowland)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Ahough still a widespread resident in coniferous and mixed oak-conifer forest of the San Gabriel Mountains, occurring at lower elevations along deep, shady canyons (e.g., Arroyo Seco near Pasadena), true lowland populations have been virtually eliminated. This woodpecker once resided year-round in the willow thickets of the Los Angeles Basin nearly to the coast, particularly along major rivers including the Los Angeles and San Gabriel Rivers. A population occurs along the Santa ClaraRiver and major tributaries including SanFrancisquito, Castaic Creek, and Soledad Canyons (Pers. Obs.). The proposed development envelope and fuel modification zone lack suitable habitat elements.
Contopus cooperi Olive-sided flycatcher	--	--	-- (Nesting) G4/S4 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Uncommon to common, summer resident in a wide variety of forest and woodland habitats throughout California exclusive of the deserts, the Central Valley, and other lowland valleys and basins. Preferred nesting habitats include mixed conifer, montane hardwood-conifer, Douglas fir, redwood, red fir, and lodgepole pine. Requires large, tall trees, usually conifers, for nesting and roosting sites; and lofty perches, typically the dead tips or uppermost branches of the tallest trees, for singing posts and hunting perches. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Empidonax wrightii Gray flycatcher	--	--	-- G5/SNR LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Overall uncommon in the county throughout the year, breeding Gray Flycatchers rely on arid, brushy habitat away from urbanized areas. Wintering birds are often found in urban parks and flood-control basins. During the breeding season, confined to a few sites in arid conifer woodlands dominated by pinyons on the north slope of the San Gabriel Mountains. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Empidonax traillii extimus Southwestern willow flycatcher	FE March 1995	SE January 1991	SSC (Nesting) G5T1T2/S1 LA County SBS (Montane & Lowland Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Summer resident. Breeds in dense riparian vegetation near surface water or saturated soil. Riparian patches used vary in size and shape, and may be a relatively dense, linear contiguous stand or an irregularly shaped mosaic with open areas. The proposed development envelope and fuel modification zone lack suitable habitat elements. The wildlife biologist holds a USFWS permit and CDFW MOU authorizing surveys for this species; they are very familiar with its habitat requirements and life history.
Lanius ludovicianus Loggerhead shrike	--	--	SSC (Nesting) G4/S4 LA County SBS (Desert Slope & Coastal Slope Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE – POTENTIAL NEST SITES ABSENT LOW POTENTIAL IN FUEL MODIFICATION ZONE – POTENTIAL NEST SITES ABSENT Found in arid grassland, open savannah, agricultural areas, and both coastal and desert scrub, often near areas of barren soil, including overgrazed land. Requires scattered thorny shrubs for nest placement and for hanging prey. The proposed development envelope lacks suitable habitat elements. The fuel modification zone consists of suitable habitat; however, throny shrubs (and barbed wire fencing) are lacking. The biologist did not observe the species during the site visit.
Vireo vicinior Gray Vireo	--	--	SSC (Nesting) G4/S2 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE In California it breeds in the Grapevine Mountains of Inyo Co., and in the mountain ranges of the eastern Mojave Desert, the drier northern and eastern slopes of the Transverse Ranges, the San Jacinto Mountains, and on the southern slopes of the Laguna Mountains. Breeding birds arrive in California from late March to early May. Most depart the United States in winter but occur in small numbers in southern Arizona and western Texas. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Vireo bellii pusillus Least Bell's vireo	FE May 1986	SE October 1980	SSC (Nesting) G5T2/S2 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Frequents riparian habitats and require dense thickets of willow and other low shrubs for nesting. The dense riparian thickets they occupy are usually impenetrable, with ground cover in the shrub layer being nearly 100%. The proposed development envelope and fuel modification zone lack suitable habitat elements. The wildlife biologist holds a USFWS permit and CDFW MOU authorizing surveys for this species; they are very familiar with its habitat requirements and life history. Dry Canyon Creek consists of marginally suitable habitat.
Pica nuttalli Yellow-billed magpie	--	--	-- (Nesting & Communal roosts) G3G4/S3S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A common, yearlong resident of the Central Valley, and coastal mountain ranges south from San Francisco Bay to Santa Barbara Co. Inhabits valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, orchard vineyard, cropland, pasture, and urban habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Eremophila alpestris actia California horned lark	--	--	WL G5T3Q/S3 LA County SBS (Coastal Slope)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Frequents grasslands and other open habitats with low, sparse vegetation. The proposed development envelope and fuel modification zone consist of suitable habitat elements. The biologist did not observe the species during the site visit.

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Progne subis arboricola Purple martin	--	--	SSC (Nesting) G5/S3 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE An uncommon to rare, local summer resident in a variety of wooded, low-elevation habitats throughout the state; a rare migrant in spring and fall, absent in winter. Uses valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats, including closed-cone pine-cypress, ponderosa pine, Douglas fir, and redwood. . The property consists of elements suitable for the occurrence of this species; however, in southern California it is now only a rare and local breeder on the coast and in interior mountain ranges. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Riparia riparia Bank swallow	--	SE June 1989	-- (Nesting) G5/S2S3 LA County SBS (Breeding)	MAY FORAGE OVER PROPERTY DURING MIGRATION Restricted to riparian habitats during summer and open habitats during migration. Requires vertical banks, bluffs, or cliffs with fine-textured or sandy soils for nesting. It nests along a small section of the Sacramento and Feather rivers and other isolated areas. Species not known to nest in the region.
Baeolophus inornatus Oak titmouse	--	--	-- (Nesting) G4/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A common resident in a variety of habitats, but primarily associated with oaks. Occurs in montane hardwood-conifer, montane hardwood, blue, valley, and coastal oak woodlands, and montane and valley foothill riparian habitats in cismontane California, from the Mexican border to Humboldt County. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek consists of habitat suitable for this species.

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Campylorhynchus brunneicapillus sandiegensis Coastal cactus wren	--	--	SSC (San Diego & Orange counties) G5T3Q/S3 LA County SBS (Coastal Slope)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Coastal race found in arid parts of westward-draining slopes of southern California; numbers reduced in recent decades. Frequents desert succulent shrub, Joshua tree, and desert wash habitats. Nest usually built in cholla or other large, branching cactus, in yucca, or in stiff-twigged, thorny shrub or small tree. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Cistothorus palustris clarkae Marsh wren	--	--	SSC G5T2T3/S2S3 LA County SBS (Interior Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A yearlong resident along northern and central coast, in the Central Valley, and in scattered locations in transmontane California. Migrants and winter residents may occur in any low vegetation growing in water or on damp ground. Breeding is restricted to cattails, bulrushes, sedges, and other vegetation in emergent wetland habitat. In southern California, breeds mainly in Imperial and Colorado River valleys, locally along the coast, and in a few desert wetlands. In the county it breeds primarily in the Antelope Valley at Piute Ponds, at Lake Palmdale, and Elizabeth Lake. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Polioptila californica California gnatcatcher	FT March 1993	--	SSC G3T2/S2 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Obligate resident of arid coastal scrub. California buckwheat, coastal sage, and patches of prickly pear cactus are favored. Species nests within the vicinity of California State University Channel Islands. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Sialia currucoides Mountain bluebird	--	--	-- G5/SNR LA County SBS (Wintering)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Always occurring almost exclusively as a wintering bird in the county, small flocks once wintered on the coastal plain, though in varying numbers year to year. Currently, the species is extremely rare on the coastal slope, and birds are confined to remote expanses of grassland and irrigated pastureland on the floor in the Antelope Valley, approaching the northern slope of the Transverse Range (Sierra Pelona) near Gorman. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Catharus ustulatus Swainson's thrush	--	--	-- G5/SNR LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE West coast populations primarily occupy riparian woodlands, and our county birds were historically concentrated in willow-alder riparian thickets in the lowlands. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek consists of habitat suitable for this species.
Toxostoma lecontei LeConte's Thrasher	--	--	SSC G4/S3 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Limited to desert scrub communities in the Antelope Valley and western Mojave Desert within northern Los Angeles County. It is intolerant of disturbance and rarely found away from intact native habitats. It especially favors sandy washes with saltbush within creosote scrub or Joshua tree woodlands. It has a limited distribution within the county and is only relatively common in the few remaining areas of intact desert scrub habitat. Its overall population within the county is approximately 100 pairs. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Setophaga petechia Yellow warbler	--	--	SSC G5/S3S4 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs as a migrant and summer resident from late March through early October; breeds from April to late July in riparian woodlands from coastal and desert lowlands up to 2500 m in Sierra Nevada. Also breeds in montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek consists of marginally habitat suitable for this species.
Cardellina pusilla Wilson's warbler	--	--	-- G5/SNRB LA County SBS (Montane & Lowland Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE The county's montane-breeding population occupies riparian areas dominated by low willows and other shrubs, often within steep ravines on north-facing slopes. There are few historical records from our local mountains (egg sets are mostly from the basin). The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek consists of habitat suitable for this species.
Icteria virens Yellow-breasted chat	--	--	SSC G5/S3 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs as a migrant and in summer primarily from late March to late September in coastal California and in foothills of the Sierra Nevada. Frequents dense, brushy thickets and tangles near water, and thick understory in riparian woodland. In migration, may be found in lower elevations of mountains in riparian habitat. Breeds late April through early August. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek consists of marginally suitable habitat.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (November 2015)** **Federal Status**	**State Status**	**CDFW (Season) Global Rank/State Rank LA County (Season/Region)**	**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	--	--	WL G5T3/S2S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE – POTENTIAL NEST SITES ABSENT LOW POTENTIAL IN FUEL MODIFICATION ZONE – POTENTIAL NEST SITES PRESENT Mixed chaparral and coastal scrub. Frequents relatively steep, often rocky hillsides with grass and forb patches; also grassy slopes without shrubs, if rock outcrops are present. The proposed development envelope lacks suitable habitat elements. The fuel modification zone consists of marginally suitable habitat elements.
Spizella passerina Chipping sparrow	--	--	-- (Nesting) G5/S4S5 --	MAY FORAGE AT PROPERTY A common migrant and summer visitor throughout most of California, excluding Central Valley, southern deserts, and alpine areas. Winters less commonly in Central Valley and southern California lowlands. Prefers open wooded habitats with a sparse or low herbaceous layer and few shrubs, if any. Although apparently requires trees for resting and singing, and prefers trees for nesting, often forages in nearby herbaceous and open shrub habitats, including dry margins of wet meadows. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Spizella breweri Brewer's sparrow	--	--	-- (Nesting) G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A common summer resident and breeder east of the Cascade-Sierra Nevada crest, in mountains and higher valleys of Mojave Desert, and the southern end of the San Joaquin Valley. Breeds in treeless shrub habitats with moderate canopy, especially in sagebrush. Now mostly absent from former breeding grounds in southwestern California. Common in winter in open desert scrub and cropland habitats of southern Mojave and Colorado deserts, usually in areas with some herbaceous understory. Occurs as a rare fall transient west of Sierra Nevada, and as an uncommon fall transient and rare spring transient in southern coastal districts. The proposed development envelope and fuel modification zone lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (November 2015)** **Federal Status**	**State Status**	**CDFW (Season) Global Rank/State Rank LA County (Season/Region)**	**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
Artemisiospiza belli belli Bell's sage sparrow	--	--	WL G5T2T4/S2? --	NOT EXPECTED IN DEVELOPMENT ENVELOPE – POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE – POTENTIAL NEST SITES ABSENT Occurs on coastal slopes and part of the western slope of the sierra Nevada south into Baja California in chaparral dominated by chamise and coastal scrub dominated by sage. Breeds in fairly dense chaparral and desert scrub. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Pooecetes gramineus affinis Vesper sparrow			SSC (Wintering) G5T3?/S3? LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Winters in open grasslands and sparse shrublands in the valley and desert regions of Los Angeles County.
Chondestes grammacus Lark sparrow	--	--	-- (Nesting) G5/S4S5 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE A common to fairly common resident in lowlands and foothills throughout much of California. Frequents sparse valley foothill hardwood, valley foothill hardwood-conifer, open mixed chaparral and similar brushy habitats, and grasslands with scattered trees or shrubs. In woodlands, prefers younger stages and hardwoods (mostly oaks) rather than conifers. Nests on the ground. The proposed development envelope and fuel modification zone consist of suitable habitat elements. The biologists did not observe the species during the site visits.
Passerculus sandwichensis beldingi Belding's savannah sparrow	--	SE January 1974	-- G5T3/S3 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs year-round in salt marsh usually in the upper littoral zone. It nests in dense pickleweed. The proposed development envelope and fuel modification zone lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (November 2015)** **Federal Status**	**State Status**	**CDFW (Season) Global Rank/State Rank LA County (Season/Region)**	**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
Ammodramus savannarum Grasshopper sparrow	--	--	SSC (Nesting) G5/S2 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs nearly year-round in extensive, dense grasslands, especially those with a variety of grasses and tall forbs and scattered low shrubs for singing perches. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Melospiza lincolnii Lincoln's sparrow	--	--	-- G5/SNR LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Nests only in damp mountain meadows that support tall grasses, sedge, and corn lilies interspersed with low-growing shrubs such as willow. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Piranga flava hepatica Hepatic tanager	--	--	WL (Nesting) G5/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Rare migrant in lowlands of southern California and rare in winter. Species does not nest in the region.
Piranga rubra cooperi Summer tanager	--	--	SSC (Nesting) G5/S1 LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE An uncommon summer resident in desert riparian habitat along the lower Colorado River; very locally elsewhere in southern California deserts. Found in other localities in migration. Breeds in mature, desert riparian habitat dominated by cottonwoods and willows. Arrives on summer breeding grounds in April and usually departs by September. Transients occur elsewhere in interior mostly in May and June and September into November. Occurs along coast rarely but regularly from September to March and May to June. The proposed development envelope and fuel modification zone lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (November 2015)** **Federal Status**	**State Status**	**CDFW (Season) Global Rank/State Rank LA County (Season/Region)**	**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
Sturnella neglecta Western meadowlark	--	--	-- G5/SNR LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Once abundant in Los Angeles County's lowlands but now can only commonly be found in agricultural land and other open habitats in the Antelope Valley. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Agelaius tricolor Tricolored blackbird	--	SE Emergency December 2013 Expired December 2014	SSC (Nesting Colony) G2G3/S1S2 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Feeds in grassland and cropland habitats and breeds near fresh water in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, and tall herbs March through November. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Xanthocephalus xanthocephalus Yellow-headed blackbird	--	--	SSC (Nesting) G5/S3 LA County SBS	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Breeds commonly, but locally, east of Cascade Range and Sierra Nevada, in Imperial and Colorado River valleys, in the Central Valley, and at selected locations in the coast ranges west of the Central Valley. Occurs as a migrant and local breeder in deserts and along the Orange county coast. Nests in fresh emergent wetland with dense vegetation and deep water, often along borders of lakes or ponds. Forages in emergent wetland and moist, open areas, especially cropland and muddy shoresof lacustrine habitat. The proposed development envelope and fuel modification zone lack suitable habitat elements.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (November 2015)**			**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [5]
	Federal Status	**State Status**	**CDFW (Season) Global Rank/State Rank LA County (Season/Region)**	
Icterus parisorum Scott's oriole	--	--	-- G5/SNR LA County SBS (Breeding)	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Throughout the southwest, favors arid slopes and highlands supporting larger plants such as Joshua trees, mesquite-acacia associations, pinyon-juniper woodland, and dry oak woodland. It will breed in oases with larger trees, but is absent from areas of low desert scrub. The large territories typical of this species further constrain the breeding locales available. County breeders are concentrated in a few tracts of extensive Joshua tree woodland in the eastern Antelope Valley and patches of pinyon-juniper woodland on the north flank of the San Gabriel Mountains. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Spinus lawrencei Lawrence's goldfinch	--	--	-- (Nesting) G3G4/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE – POTENTIAL NEST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE – POTENTIAL NEST SITES ABSENT Occurs April through September in valley foothill hardwood, valley foothill hardwood-conifer, desert riparian, palm oasis, pinyon-juniper, and lower montane habitats. Breeds in open oak or other arid woodland and chaparral, near water but rarely along immediate coast. The proposed development envelope and fuel modification zone lack suitable habitat elements. Dry Canyon Creek consists of habitat suitable for this species but it rarely breeds along the immediate coast.

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MAMMALS				
Sorex ornatus salicornicus Southern California saltmarsh shrew	--	--	SSC G5T1?/S1 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE The Southern California salt marsh shrew is confined to coastal salt marshes in Los Angeles, Orange, and Ventura counties. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Macrotus californicus California leaf-nosed bat	--	--	SSC G4/S2S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT Preferred habitats are caves, mines, and rock shelters, mostly in Sonoran desert scrub. It does not hibernate. Winter roosts are geothermically heated. Mating takes place in the fall. Pups born June. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites. The wildlife biologist holds a CDFW MOU that authourizes capture of bats using a variety of techniques including hand-held nets, mist nets, and harp traps.
Antrozous pallidus Pallid bat	--	--	SSC G5/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT MAY FORAGE IN DEVELOPMENT ENVELOPE AND FUEL MODICIATION ZONE Throughout California except high Sierra Nevada. Habitat includes grassland, shrubland, woodland, and conifer forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in caves, crevices, mines, under bridges, bird and bat boxes, and occasionally hollow trees and buildings. Non-migratory. Birth occurs late June, nursing continues into August. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites.

[6] *Habitat Notes are taken from California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships, Sacramento, California.*

SCIENTIFIC NAME COMMON NAME	STATUS (November 2015)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY [6]
	Federal Status	State Status	CDFW (Season) Global Rank/State Rank LA County (Season/Region)	
Euderma maculatum Spotted bat	--	--	SSC G4/S2S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT Occupied habitats include arid deserts, grasslands, and mixed conifer forests. Prefers sites with adequate roosting habitat, such as cliffs. Feeds over water and along washes. Pups are born late May to early June, nursing continues into August. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites.
Lasionycteris noctivagans Silver-haired bat	--	--	-- G5/S3S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT MAY FORAGE IN DEVELOPMENT ENVELOPE AND FUEL MODICIATION ZONE In southern California from Ventura and San Bernardino Cos. south to Mexico and on some of the Channel Islands. Summer habitats include coastal and montane coniferous forests, valley foothill woodlands, pinyon-juniper woodlands, and valley foothill and montane riparian habitats. Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites. Dry Canyon Creek consists of marginally suitable habitat for this species.
Lasiurus blossevillii Western red bat	--	--	SSC G5/S3? --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT Occurs from Shasta Co. south to Mexico, west of Sierra Nevada/Cascade crest and deserts. Feeds over scrublands, grasslands, open woodlands, and croplands. Roosts in foliage of forest and woodland trees. Pups born June. Nursing into August. Migrates to south of range to hibernate. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites. Dry Canyon Creek consists of marginally suitable habitat for this species.

SCIENTIFIC NAME COMMON NAME	STATUS (November 2015)			POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY [6]
	Federal Status	State Status	CDFW (Season) Global Rank/State Rank LA County (Season/Region)	
Myotis ciliolabrum Western small-footed myotis	--	--	-- G5/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT MAY FORAGE IN DEVELOPMENT ENVELOPE AND FUEL MODICIATION ZONE Occurs from Contra Costa County south to the Mexico and west and east of the Sierra Nevada and in Great Basin and desert habitats from Modoc to San Bernardino counties in a wide variety of habitats, primarily wooded and brushy uplands near water. Roosts in caves, buildings, mines, crevices, and occasionally under bridges and bark. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites. Dry Canyon Creek consists of marginally suitable habitat for this species.
Myotis evotis Long-eared myotis	--	--	-- G5/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT MAY FORAGE IN DEVELOPMENT ENVELOPE AND FUEL MODICIATION ZONE Widespread but generally uncommon. Occurs along the coast and in the Sierra Nevada, Cascades, and Great Basin from the Oregon border south through the Tehachapi Mts. to the Coast Ranges. Coniferous woodlands and forests preferred but alao brush habitats. Roosts in caves, buildings, snags, crevices, and under bark. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites. Dry Canyon Creek consists of marginally suitable habitat for this species.
Myotis thysanodes Fringed myotis	--	--	-- G4/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT In California, occurs in all but the Central Valley and Colorado and Mojave deserts. It occurs in a wide variety of habitats. Optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer. Roosts in caves, mines, buildings, and crevices. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites.

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Myotis volans Long-legged myotis	--	--	-- G5/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT MAY FORAGE IN DEVELOPMENT ENVELOPE AND FUEL MODICIATION ZONE It is absent only from the Central Valley, the Colorado and Mojave deserts (except in mountain ranges), and from eastern Lassen and Modoc cos. Forages in chaparral, coastal scrub, Great Basin shrub, and early successional stages of woodlands and forests. Roosts in rock crevices, buildings, under bark, in snags, mines, and caves. Maternity sites under bark or in hollow trees, but occasionally crevices or buildings. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites. Dry Canyon Creek consists of marginally suitable habitat for this species.
Corynorhinus townsendii Townsend's big-eared bat	--	SC December 2013	SSC G3G4/S2S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT Found throughout California except subalpine and alpine habitats. Roosts in caves, mines, tunnels, buildings, and other human-made structures. Prefers mesic habitats where it gleans vegetation or captures moths and beetles in flight. Pups are born in May or June, nursing continues into August. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites.
Eumops perotis californicus Greater bonneted bat	--	--	SSC G5T4/S3? --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT MAY FORAGE IN DEVELOPMENT ENVELOPE AND FUEL MODICIATION ZONE Prefers open arid areas. Crevices, high buildings, trees, and tunnels required for roosting and maternal sites. Pups are born late June through September, nursing continues into early November. Does not migrate or hibernate. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites.

SCIENTIFIC NAME **COMMON NAME**	**STATUS (November 2015)** **Federal Status**	**State Status**	**CDFW (Season) Global Rank/State Rank LA County (Season/Region)**	**POTENTIAL FOR OCCURRENCE, HABITAT NOTES, & LIFE HISTORY** [6]
Nyctinomops femorosaccus Pocketed free-tailed bat	--	--	SSC G4/S3 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - POTENTIAL ROOST SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - POTENTIAL ROOST SITES ABSENT Rare in California. Prefers rocky desert areas with high cliffs or rock outcrops. Habitats used include pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Prefers rock crevices in cliffs as roosting sites. Maternity sites include rock crevices, caverns, or buildings. Pup usually born early July. The proposed development envelope and fuel modification zone lack suitable habitat elements, specifically it lacks potential roost sites.
Bassariscus astutus Ringtail	--	--	FP G5/S3S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - DEN SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - DEN SITES ABSENT Ideal habitat consists a mix of forest and shrub land associated with rocky or riparian habitats. Its principal habitat requirements seem to be den sites among boulders or in hollows of trees with sufficient food in the form of rodents and other small animals. The biologist did not observe any potential den sites during the site visit. The proposed development envelope and the fuel modification zone lack suitable habitat elements. Dry Canyon Creek consists of marginally suitable habitat.
Taxidea taxus American badger	--	--	SSC G5/S4 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE - DEN SITES ABSENT NOT EXPECTED IN FUEL MODIFICATION ZONE - DEN SITES ABSENT Prefers dry open stages of most shrub, forest, and herbaceous habitats, with friable soils. The proposed development envelope and fuel modification zone lack suitable habitat elements. The biologists did not observe any badgers or large burrows during the site visit.
Perognathus longimembris brevinasus Los Angeles pocket mouse	--	--	SSC G5T1T2/S1S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Occurs in lower elevation grassland, alluvial sage scrub, and coastal sage scrub. The proposed development envelope and fuel modification zone lack suitable habitat elements.

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Neotoma lepida intermedia San Diego desert woodrat	--	--	SSC G5T3?/S3? --	NOT EXPECTED IN DEVELOPMENT ENVELOPE – WOODRAT HOUSES ABSENT LOW POTENTIAL IN FUEL MODIFICATION ZONE – WOODRAT HOUSES ABSENT Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats with rocky outcrops and substrates. Houses are constructed with twigs, sticks, cactus parts, and rocks, and are used for nesting, food caching, and predator escape. The proposed development envelope lacks suitable habitat elements. The proposed fuel modification zone consists of marginally suitable habitat elements; however, the biologist did not observe any woodrat houses during the site visit.
Microtus californicus stephensi South coast marsh vole	--	--	SSC G5T1T2/S1S2 --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE This subspecies occurs from Santa Barbara County south to Orange County in coastal salt marshes dominated by pickleweed. The proposed development envelope and fuel modification zone lack suitable habitat elements.
Lepus californicus bennetti San Diego black-tailed jackrabbit	--	--	SSC G5T3?/S3? --	NOT EXPECTED IN DEVELOPMENT ENVELOPE NOT EXPECTED IN FUEL MODIFICATION ZONE Abundant at lower elevations in herbaceous and desert-shrub areas and open, early stages of forest and chaparral habitats. The proposed development envelope and fuel modification zone lack suitable habitat elements. The biologist did not observe the species or any of its scat during the site visit.

Status Key:

Federal		State		California Department of Fish and Wildlife	
FE:	Federally Endangered	SE:	State Endangered	FP:	Fully Protected
FT:	Federally Threatened	ST:	State Threatened	SSC:	Species of Special Concern
FC:	Federal Candidate	SC:	State Candidate	WL:	Watch List

Potential for Occurrence: Based on professional experience, knowledge of habitat associations, and known occurrences in the region.

Present = Detected during site visit, known to occur, or recently reported to occur
Expected = Suitable habitat is present and species known to occur in the immediate vicinity
High Potential = Suitable habitat is present and species is known to occurs frequently in the region
Moderate Potential = Suitable habitat is limited and species occurs in the region infrequently
Low Potential = Species-specific survey negative or marginal habitat is present or temporary in nature and species known to occur in the immediate vicinity (potential for occurrence cannot be ruled out)
Not Expected = Suitable habitat is absent or species is not expected to occur during the "season of concern"

The official federal listing of Endangered and Threatened animals is published in the Federal Register, 50 CFR 17.11. The official state Endangered and Threatened animals list is contained in the California Code of Regulations, Title 14, Section 670.5. A state candidate species is one that the Fish and Game commission had formally noticed as being under review by the Department for addition to the State list. A federal candidate species is one for which a proposed regulation has been published in the Federal Register.

Fully Protected: This classification was the State's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Most of the species on these lists have subsequently been listed under the state and/or federal endangered species acts; white-tailed kite, golden eagle, trumpeter swan, northern elephant seal and ring-tailed cat are the exceptions. The white-tailed kite and the golden eagle are tracked in the CNDDB; the trumpeter swan, northern elephant seal and ringtail cat are not. The Fish and Game Code sections dealing with Fully Protected species state that these species "may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research. This language arguably makes the "Fully Protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003 the code sections dealing with fully protected species were amended to allow the Department to authorize take resulting from recovery activities for state-listed species. More information on Fully Protected species and the take provisions can be found in the Fish and Game Code, (birds at §3511, mammals at §4700, reptiles and amphibians at §5050, and fish at §5515). Additional information on Fully Protected fish can be found in the California Code of Regulations, Title 14, Division 1, Subdivision 1, Chapter 2, Article 4, §5.93. The category of Protected Amphibians and Reptiles in Title 14 has been repealed.

California Species of Special Concern: It is the goal and responsibility of the Department of Fish and Wildlife to maintain viable populations of all native species. To this end, the Department has designated certain vertebrate species as "Species of Special Concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as "Species of Special Concern" is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long term viability. Not all "Species of Special Concern" have declined equally; some species may be just starting to decline, while others may have already reached the point where they meet the criteria for listing as a "Threatened" or "Endangered" species under the State and/or Federal Endangered Species Acts.

Global Rank (G Rank) is a reflection of the overall status of an element throughout its global range. Both Global and State ranks represent a letter and number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two. Taxa that are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies.

GQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
GX = Presumed Extinct - Species not located despite intensive searches and virtually no likelihood of rediscovery. Ecological community or system eliminated throughout its range, with no restoration potential.
GH = Possibly Extinct - Known from only historical occurrences but some hope of rediscovery. Evidence exists that species may be extinct or ecosystem eliminated throughout its range, but not enough to state this with certainty.
G1 = Critically Imperiled - At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled - At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable - At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure - Common; widespread and abundant.
G? = Inexact Numeric Rank
GU = Unrankable
GNR = Unranked
GNA = Not Applicable
C = Captive or Cultivated Only

State Rank (S Rank) is assigned much the same way as the global rank, but state ranks refer to the imperilment status only within California's state boundaries.

SQ = Questionable Taxonomy - Denotes an element that is very rare, but there are taxonomic questions associated with it.
SX = Presumed Extirpated
SH = Possibly Extirpated
S1 = Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled - Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
S3 = Vulnerable - Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer) recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
S4 = Apparently Secure - Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.
S5 = Secure- Common, widespread, and abundant in the state.
S? = Inexact Numeric Rank
SU = Unrankable
SNR = Unranked
SNA = Not Applicable

LA County SBS = Los Angeles County Sensitive Bird Species (Season/Region of concern)

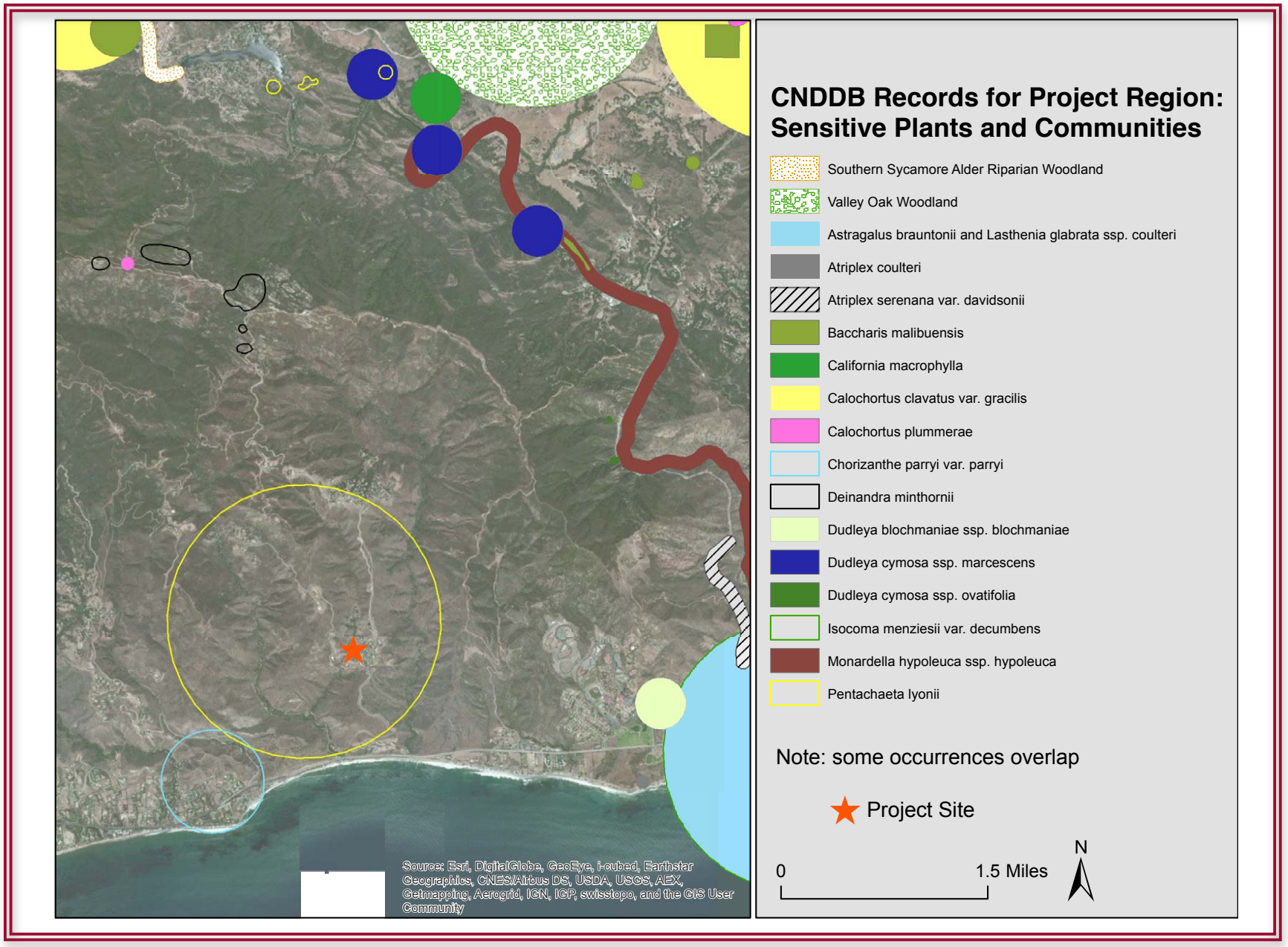

Exhibit I - Special-Status Species (BIOS) Map

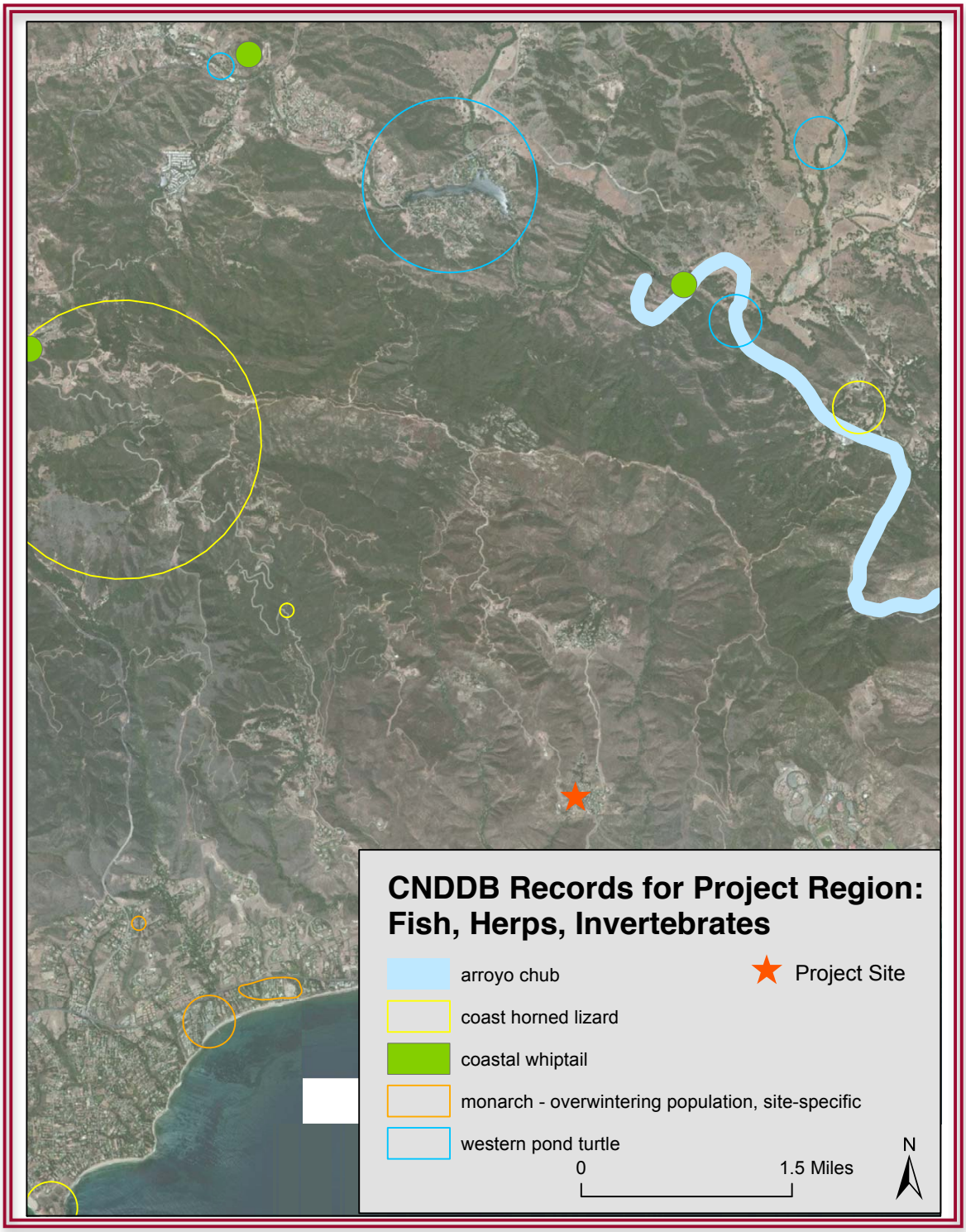

Exhibit I - Special-Status Species (BIOS) Map

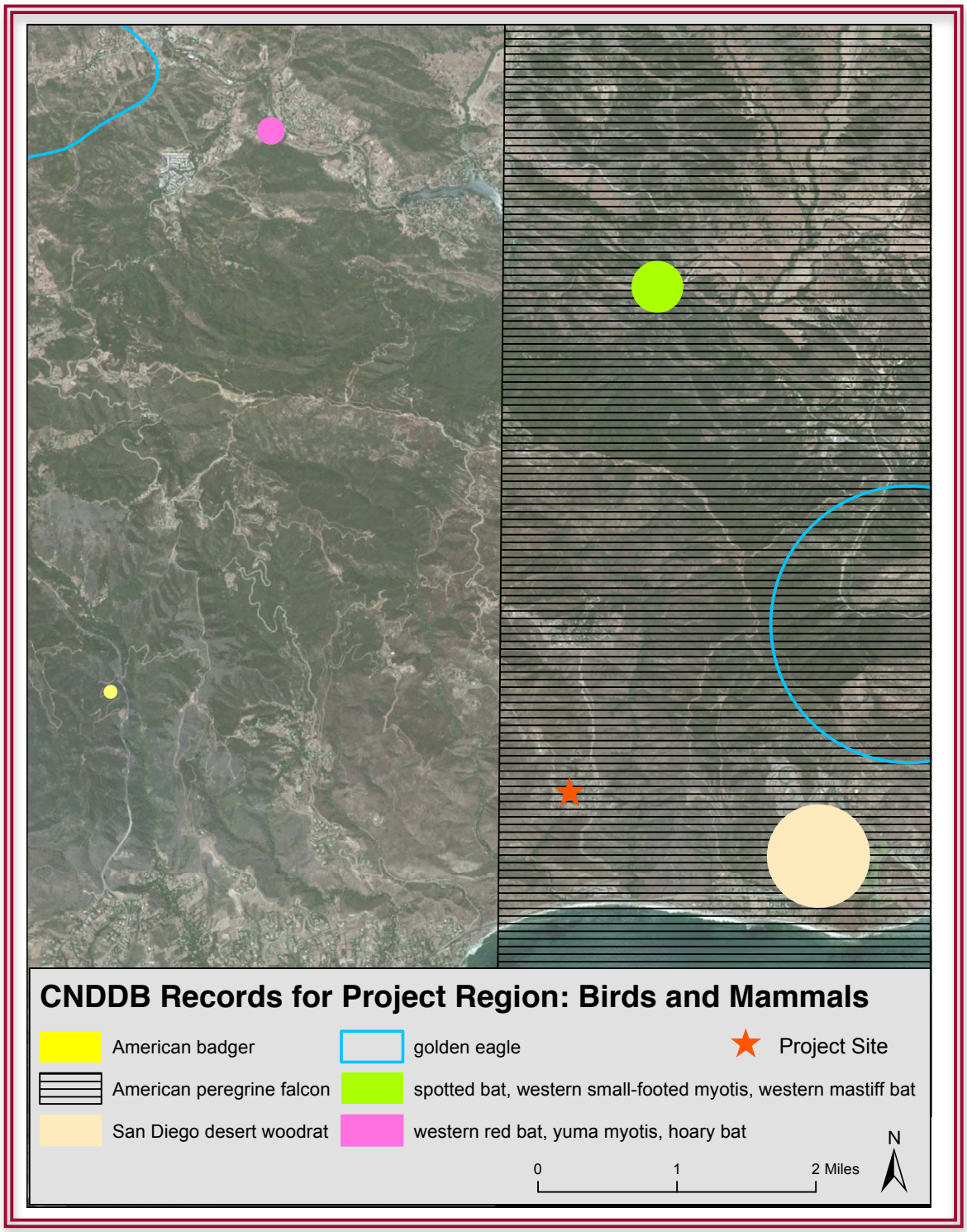

Exhibit I - Special-Status Species (BIOS) Map

100 - Chumash-Boades-Malibu association, 30 to 75 percent slopes

Map Unit Setting
General location: Low-elevation coastal hills and mountains
Major uses: Wildlife habitat, recreation, and building site development
Major land resource area (MLRA): 20—Southern California Mountains
Landform: Hills and mountains
Elevation: 5 to 1,545 feet (3 to 471 meters)
Mean annual precipitation: 14 to 18 inches (360 to 457 millimeters)
Mean annual air temperature: 60 to 64 degrees F (16 to 18 degrees C)
Frost-free period: 290 to 350 days

Map Unit Composition
Chumash and similar soils—35 percent
Boades and similar soils—25 percent
Malibu and similar soils—25 percent
Minor components—15 percent

Major Components

Chumash
Slope: 30 to 75 percent
Aspect (clockwise): Dominantly southwest to southeast
Landform: Hills and mountains
Parent material: Colluvium and/or residuum derived from sandstone and shale
Typical vegetation: Grey coast eriogonum

Selected properties and qualities
Surface pH: 6.8
Surface area covered with coarse fragments: None
Depth to restrictive feature: Bedrock (paralithic)—4 to 22 inches
Slowest permeability class: Moderate above the bedrock
Salinity: Nonsaline
Sodicity: Nonsodic
Available water capacity to a depth of 60 inches: About 0.9 inch (very low)
Shrink-swell potential: Moderate (LEP 3 to less than 6)
Soil slippage potential: High

Selected hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff: Very high
Current water table: Not present
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: D

California land use interpretive groups
Land capability class (irrigated): Not calculated
Land capability class (nonirrigated): 7e
Farmland classification: Not prime farmland or statewide important farmland
Ecological site: R020XD041CA, Shallow Coastal Scrub 14-16" p.z.

Typical profile
A—0 to 7 inches; gravelly loam
Cr—7 to 17 inches; soft, weathered bedrock

Boades
Slope: 30 to 75 percent
Aspect (clockwise): Dominantly northwest to northeast
Landform: Hills and mountains
Parent material: Colluvium and/or residuum derived from sandstone and shale
Typical vegetation: Coastal scrub

Selected properties and qualities
Surface pH: 6.0
Surface area covered with coarse fragments: None
Depth to restrictive feature: Bedrock (paralithic)—10 to 20 inches
Slowest permeability class: Moderately slow above the bedrock
Salinity: Nonsaline
Sodicity: Nonsodic
Available water capacity to a depth of 60 inches: About 1.6 inches (very low)
Shrink-swell potential: Moderate (LEP 3 to less than 6)
Soil slippage potential: High

Selected hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff: Very high
Current water table: Not present
Natural drainage class: Well drained
Hydrologic soil group: D

California land use interpretive groups
Land capability class (irrigated): Not calculated
Land capability class (nonirrigated): 7e
Farmland classification: Not prime farmland or statewide important farmland
Ecological site: R020XD039CA, Coastal Scrub 14-16" p.z.

Typical profile
A1—0 to 2 inches; loam
A2—2 to 14 inches; loam
Cr—14 to 24 inches; soft, weathered bedrock

Malibu
Slope: 30 to 75 percent
Aspect (clockwise): Dominantly northeast to west
Landform: Hills and mountains
Parent material: Colluvium and/or residuum derived from interbedded sandstone and shale
Typical vegetation: Coastal scrub

Selected properties and qualities
Surface pH: 6.4
Surface area covered with coarse fragments: None
Depth to restrictive feature: Bedrock (paralithic)—20 to 40 inches
Slowest permeability class: Very slow above the bedrock
Salinity: Nonsaline
Sodicity: Nonsodic
Available water capacity to a depth of 60 inches: About 3.4 inches (low)
Shrink-swell potential: Moderate (LEP 3 to less than 6)
Soil slippage potential: High

Selected hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff: Very high
Current water table: Not present
Natural drainage class: Moderately well drained
Hydrologic soil group: D

California land use interpretive groups
Land capability class (irrigated): Not calculated
Land capability class (nonirrigated): 7e
Farmland classification: Not prime farmland or statewide important farmland
Ecological site: R020XD039CA, Coastal Scrub 14-16" p.z.

Typical profile
A—0 to 19 inches; loam
2Bt—19 to 27 inches; clay
2Cr—27 to 37 inches; weathered bedrock

Minor Components

Pachic Argixerolls
Percentage of map unit: About 5 percent
Slope: 15 to 50 percent
Landform: Hills and mountains

Rock outcrop
Percentage of map unit: About 5 percent
Landform: Hills and mountains

Cotharin
Percentage of map unit: About 5 percent
Slope: 30 to 75 percent
Landform: Hills and mountains

250 - Urban land-Xerorthents, landscaped, complex, 0 to 5 percent slopes

Map Unit Setting
General location: Urban areas
Major uses: Wildlife habitat, recreation, and building site development
Major land resource area (MLRA): 20—Southern California Mountains
Landform: Hills and valleys
Elevation: 30 to 1,965 feet (10 to 600 meters)
Mean annual precipitation: 14 to 24 inches (360 to 610 millimeters)
Mean annual air temperature: 60 to 64 degrees F (16 to 18 degrees C)
Frost-free period: 290 to 350 days

Map Unit Composition
Urban land—75 percent
Xerorthents, landscaped, and similar soils—25 percent

Major Components

Urban Land
Aspect (clockwise): None dominant
Description of areas: Houses and other buildings, streets, parking lots, and associated landscaped areas
Typical vegetation: None assigned

California land use interpretive groups
Land capability class (irrigated): Not calculated
Land capability class (nonirrigated): 8
Farmland classification: Not prime farmland or statewide important farmland
Ecological site: Not assigned

Xerorthents, Landscaped
Slope: 0 to 5 percent
Aspect (clockwise): Dominantly north to west
Position on landform: Leveled areas
Parent material: Colluvium and residuum derived from sedimentary rock and other mixed sources
Typical vegetation: Ornamental plants and lawns

Selected properties and qualities
Surface pH: 7.4
Surface area covered with coarse fragments: None
Depth to restrictive feature: Bedrock (paralithic)—10 to 60 inches
Slowest permeability class: Slow above the bedrock
Salinity: Nonsaline
Sodicity: Nonsodic
Available water capacity to a depth of 60 inches: About 8.3 inches (high)
Shrink-swell potential: Low (LEP less than 3)

Selected hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff: Medium
Current water table: Not present
Natural drainage class: Well drained
Hydrologic soil group: D

California land use interpretive groups
Land capability class (irrigated): 2e-1
Land capability class (nonirrigated): 2e-1
Farmland classification: Not prime farmland or statewide important farmland
Ecological site: Not assigned

Typical profile
A—0 to 4 inches; loam
C—4 to 52 inches; loam
Cr—52 to 62 inches; soft, weathered bedrock

100 - Chumash-Boades-Malibu association, 30 to 75 percent slopes
250 - Urban land-Xerorthents, landscaped, complex, 0 to 5 percent slopes

Exhibit K - SMM LCP-Net Habitat Map

Exhibit L - Site-Specific Habitat Map

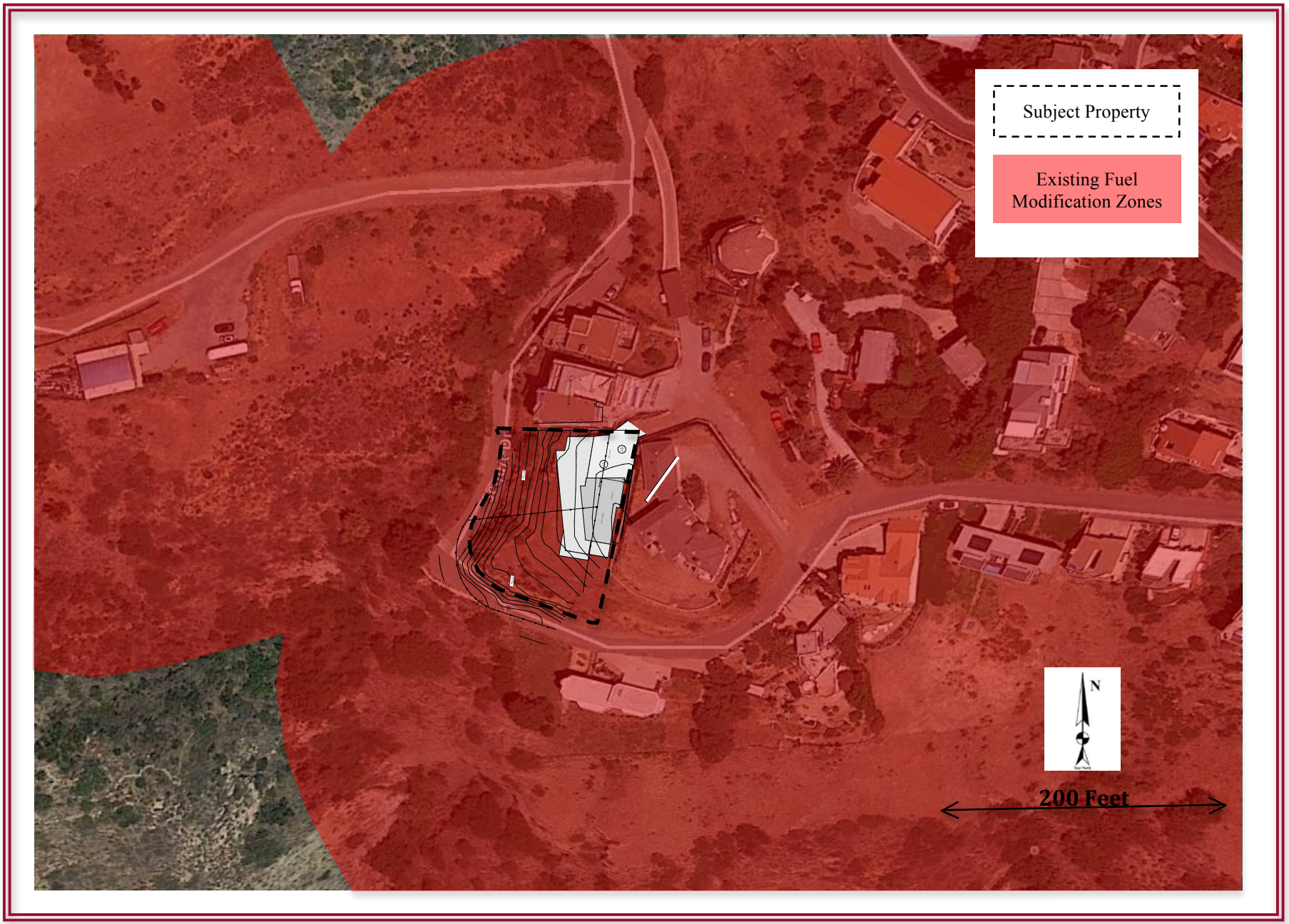

Exhibit M - Site Plan & Existing Fuel Modification Zones

Santa Monica Mountains Biological Assessment Checklist	**Page**	**Initials**
Title Page		
A. Project name.	Title	amf
B. County identification numbers (Project number, Permit number, APN's)	Title	amf
C. Applicant name and contact information	Title	amf
D. Name and affiliation of preparer.	Title	amf
E. Date.	Title	amf
I. Project and Survey Description		
A. Project description.	P 1	amf
1. Project name, type of report, address of project.	Title & P1	amf
2. County application identification numbers including APNs.	Title & P1	amf
3. Applicant name and contact information.	Title	amf
4. Parcel and acreage information.	Title & P1	amf
5. Location.	P1	amf
a. Map of regional features showing project location, including watershed boundaries, proximity to public lands, streams, drainages, and roads.	Exhibit A, B, C, D, E,	amf
b. Color aerial photograph(s) showing regional context of project, project parcel(s), existing development, open space, etc.	Exhibit A	amf
6. Detailed description of proposed project, including area of vegetation removal, modification, or disturbance, grading volumes, etc.	P1, P14	amf
B. Description of major natural features.1. Landforms and geomorphology.2. Drainage and wetland features.3. Soils (soil/geological map optional).	P 1, P4, Exhibit D, E, J	amf
C. Methodology of biological survey.1. Date(s) of survey(s).2. Detailed description of survey methods.	P 1, P3	amf
II. Biological Characteristics of the site		
A. Flora.	P 6	amf
1. Map of vegetation communities, specifying system used (the use of Sawyer et al. 2009 is recommended)	Exhibit E	amf
2. Map of project site showing the habitat areas (HI, H2, H2 "High Scrutiny", H3 Habitat) from the LUP Biological Resources map.	Exhibit K	amf
3. Vegetation cover table, with acreages of each vegetation type (can be a legend in map)	P 11	amf
4. Location, trunk, diameter, and canopy extent mapped for each protected tree (oak, sycamore, walnut, bay) that is within 25 feet of any portion of the proposed development (on-site or off-site). Note: for protected oaks (>5" DBH) on or within 200' of property, an oak tree report is required. Include oak tree reports in an appendix	N/A	amf
B. Fauna.	P 7	amf
1. Discussion of species observed; description of wildlife community.	P 7	amf
C. Sensitive species.	P 7	amf

1. Table of possible sensitive species and possible sensitive vegetation, including brief description of potential impacts to any sensitive species.	Exhibit H	amf
2. Maps of occurrence for sensitive species observed	N/A	amf
D. List of flora and fauna observed or known from site	P6, P7, Exhibit G	amf
E. Survey Checklist (see Part B, Survey Checklist, above)	Appendix 1	amf
III. Bibliography		
A. Bibliography of references cited in text	See footnotes	amf
IV. Appendices		
A. Site photographs (color)	Exhibit F	amf
B. Qualifications of biologists and other contributors	Appendix 2	amf
C. Oak tree report for sites with jurisdictional native oak trees	N/A	amf

Andrew Forde

Wildlife Biologist

Mr. Forde has a research degree in wildlife biology read for at the University of St Andrews, Scotland and has a higher national certificate in biology read for at Stow College, Scotland. He has more than 14 years consulting experience in southern California primarily as a wildlife biologist. He has participated in research projects with the United States Geological Service, United States Fish and Wildlife Service, and California Department of Fish and Wildlife (CDFW), and has worked at University of California, Davis, Raptor Center. He has conducted countless surveys for special-status, threatened, and endangered species, written numerous biological reports and assessments, prepared and reviewed sections for CEQA documents, edited scientific papers for the United States Geological Survey, and has written communications for press release. He has also conducted botanical surveys, delineated wetlands, prepared reports, Section 404 and 401 applications, and Section 1600 Streambed Alteration Agreements.

He has held permits authorizing take of more than 10 threatened and endangered species. His current 10(a)(1)(A) Federal Fish and Wildlife Permit, TE-062907-8, authorizes take of quino checkerspot butterfly, southwestern willow flycatcher, least Bells vireo, and California gnatcatcher throughout their range. Federal Bird Marking Permit 23529 authorizes capture, banding, and marking of willow flycatcher. CDFW Memorandum of Understanding (MOU) 3-6-2012 and Scientific Collectors Permit (SCP) SCP-3750 authorize the above activities and authorization to take willow flycatcher and trap and sacrifice brown-headed cowbirds for the purpose of enhancing the survival of threatened and endangered species. CDFW SCP-3750 also authorizes survey and capture of invertebrates, reptiles, amphibians, birds, and mammals using a variety of techniques, including pitfall. CDFW MOU also authorizes capture of bats using mist nets, hand-held nets, and harp traps. He also uses acoustical equipment and sophisticated software to identify bats.

Forde
BIOLOGICAL CONSULTANTS

Education

Bachelor of Science, Honors, Biology, St Andrews University, Scotland, 1997

Higher National Certificate, Biology, Stow College, Scotland, 1993

Permits

10(a)(1)(A) Federal Fish and Wildlife Permit, TE-062907-6, authorizes take of quino checkerspot, southwestern willow flycatcher, least Bells vireo, and California gnatcatcher throughout their ranges.

CDFW Memoranda of Understanding, dated March 2012, authorizes take of willow flycatcher, least Bells vireo, and California gnatcatcher throughout the state.

Federal Bird Marking Permit, 23529, authorizes capture, banding, and marking of southwestern willow flycatcher.

CDFW Memoranda of Understanding, dated March 2012, authorizes take of bats throughout California.

CDFW Memorandum of Understanding, dated March 2012, authorizes trapping and sacrifice of brown-headed cowbirds.

CDFW Scientific Collectors Permit, SCP-3750, authorizes activities listed in the above permits and MOU and includes authorizations to survey and capture invertebrates, reptiles, amphibians, and mammals for the purpose of identification.

Special Training

Flat-tailed Horned Lizard, Bureau of Land Management, 2014

Bat Capture & Handling, National Trust Scotland, August 2012

Bat Ecology, Survey Techniques, & Guidelines, National Trust Scotland, August 2012

Yellow-Billed Cuckoo, Southern Sierra Research Station, June 2012

Bat Conservation and Management, Bat Conservation International, May 2012

Raptor Research Conference (Scotland), Raptor Research Foundation, October 2009

Bat Ecology & Identification, The Wildlife Society, August 2004

Bat Ecology, Identification, & ANABAT, Michael O'Farrell & Chris Corben, June 2004

Ecology of Vernal Pool Grasslands, University of California, Davis, 2004

Southwestern Willow Flycatcher, The Southern Sierra Research Group, May 2004

Sensitive Butterflies of San Diego County, Faulkner & Klein, 2003

California Branchiopod, Mary Belk, 2003

Sensitive Reptiles & Amphibians, The Wildlife Society, 2003

Invertebrates

Mr. Forde has held permits authorizing take of at least 8 threatened and endangered invertebrates. His primary focus is butterflies. He has attended workshops hosted by the San Diego Natural History Museum and by Faulkner and Klein, studied specimens at museums, and has taken and passed the US Fish and Wildlife Service quino checkerspot butterfly exam on all three occasions that he has taken it. The exam requires the taker to be able to identify approximately 40 species of co-occurring butterfly. He has also passed the services branchiopod exam on multiple occasions, which requires the taker to be able to identify all 27 species that occur in California. He has conducted surveys for threatened and endangered invertebrates in San Diego, Riverside, San Bernardino, and Ventura counties, and has assisted the USFWS in support of their long-term monitoring efforts of endangered and threatened species.

Reptiles & Amphibians

Mr. Forde has attended several workshops that focused upon ecology, life history, and distribution of reptiles and amphibians. His SCP authorizes take of numerous reptiles and amphibians for the purpose of identification. He has conducted surveys for reptiles in Imperial, San Diego, Orange, Riverside, San Bernardino, Ventura, Los Angeles, Santa Barbra, Kern, and other counties. He has detected numerous special-status species during these surveys including southwestern pond turtle, San Diegan tiger whiptail (100s of individuals), southern California legless lizard (100 of individuals), coast-horned lizard, San Bernardino ringneck snake, San Diego Mountain kingsnake, two-striped garter snake, south coast garter snake, western spadefoot, arroyo toad, and California red-legged frog.

Birds

Mr. Forde's Federal Fish and Wildlife Permit, CDFW MOU, and SCP authorize take (survey, locate nests, monitor nests, and remove brown-headed cowbird eggs and chicks from parasitized nests) of southwestern willow flycatcher, least Bell's vireo, and California gnatcatcher. Federal Bird Marking Permit, 23259, authorizes him to capture, band, and mark southwestern willow flycatcher. He has conducted surveys for flycatcher on Castaic Creek, Santa Clara River, San Francisquito Creek, San Gabriel River, Santa Ana River, Rio Hondo, Whittier Narrows, Salinas River,

Lower Colorado River, the Bill Williams River, the Gila River, the All American Canal, Imperial National Wildlife Area, Mittry Lake Wildlife Area, Bill Williams River National Wildlife Refuge, and Havasu National Wildlife Refuge among numerous smaller rivers, creeks, and wetlands. He has monitored their nests to determine reproductive success and collect other pertinent data and has captured individuals using calls and mist nets for the purpose of banding them, and collecting blood and feather samples for DNA analysis. He has conducted surveys for least Bell's vireo on Castaic Creek, the Santa Clara River, San Francisquito Creek, San Gabriel River, Santa Ana River, Rio Hondo, Whiitier Narrows, and Salinas River among numerous smaller rivers and creeks. He has conducted surveys for California gnatcatcher throughout San Diego, Orange, Riverside, San Bernardino, Ventura, and Los Angeles counties. He has found at least one nest in every territory established by these species in the areas that he has surveyed. His SCP also authorizes take (survey, locate nests, monitor nests) of burrowing owl. He has conducted surveys for burrowing owl in Imperial, San Diego, Orange, Riverside, San Bernardino, Ventura, and Los Angeles counties. He has observed hundreds of individuals and nest burrows.

Small Mammals

Mr. Forde has attended workshops hosted by Bat Conservation International, Michael O'Farrell, Chris Corben, The Wildlife Society, The Desert Institute, and the National Trust for Scotland that focused upon the ecology and identification of small mammals. He has conducted surveys for small mammals throughout southern California using a variety of methods to identify them including trapping, spotlighting, scent/track stations, and camera stations. He has also conducted surveys in Arizona, Nevada, Utah, and the west coast of Scotland using mist-nets, hand-held nets, harp traps, to capture and identify bats. He has captured and identified numerous special-status species including western small-footed myotis, long-eared myotis, fringed myotis, long-legged myotis, silver-haired bat, western red bat, pallid bat, greater bonneted bat, and state candidate, Townsend's big-eared bat. He also uses acoustical equipment and analytical software to identify bats using full spectrum, heterodyne, frequency-division, and time-expansion, and conducts emergence surveys using spotlights, infrared lights (IRLamp6), and night-vision cameras (Sony Night Shot, Samsung Nite Lite).

Special Training

Giant Garter Snake, The Wildlife Society, 2003

Blunt-Nosed Leopard Lizard Survey Technique & Identification, The Wildlife Society, 2003

Owl Survey Techniques, Kern River Preserve, 2002

Desert Tortoise Survey and Handling Workshop, The Desert Tortoise Council, November 2002

Desert Mammals, The Desert Institute, 2002

Desert Birds, The Desert Institute, 2002

Desert Reptiles & Amphibians, The Desert Institute, 2002

Springtime Desert Butterflies, San Diego Natural History Museum, 2002

Flat-tailed Horned Lizard, Bureau of Land Management, 2001

Arroyo Toad Handling Techniques, Authorized by U.S. Fish and Wildlife Service, 2001

Burrowing Owl Ecology, University California Davis, Raptor Center, 1999

Raptor Capture & Handling Techniques, University California Davis, Raptor Center, 1999

Bird Banding & Species Identification, Ventana Wilderness Sanctuary, 1998

Special Training

Environmental Law Conference, The State Bar of California, October 2014

Environmental Law Conference, The State Bar of California, October 2006

Advanced Wetland Delineation, Richard Chinn Environmental, 2003

Navigating Federal & State Permits for Developments in Waters of California, University of California Los Angeles, 2002

Wetland Delineation & Management, Richard Chinn Environmental, 2002

The Basics of the California Environmental Quality Act, Association of Environmental Professionals, 2002

Botanical Surveys

Mr. Forde has held CDFW State-Listed Plant Collection Permits authorizing him to collect state listed endangered, threatened, and rare plants in California. He has conducted botanical surveys in Imperial, San Diego, Orange, Riverside, San Bernardino, Los Angeles, Ventura, and Santa Barbra counties. He has observed numerous special-status, rare, threatened, and endangered species including Catalina mariposa lily, slender mariposa lily, Plummer's mariposa lily, Lewis's evening primrose, southern tarplant, San Fernando spineflower, Parry's spine-flower, Santa Susana tarplant, Agoura Hills dudleya, Santa Monica Mountains dudleya, Conejo dudleya, Conejo buckwheat, and Lyon's pentachaeta,

Wetland Delineation

Mr. Forde has attended basic and advanced wetland delineation workshops and attended courses hosted by the University of California, Los Angeles that focused on federal and state permitting for development in waters of California. The workshops focused on the application of the 1987 Wetland Delineation Manual and Regional Supplements used by the Army Corps of Engineers. During the workshops and courses, he gained valuable knowledge and experience of technical guidelines for wetland delineation, regional supplement field indicators for hydrophytic vegetation, hydric soils, and wetland hydrology, methods for making jurisdictional determinations, and the permitting process. Since that time, he has delineated streams and wetlands in Orange, Riverside, San Bernardino, Ventura, and Los Angeles counties including major portions of the Santa Clara River and the Ballona Wetlands. He has also prepared Section 404 (US Army Corp of Engineers), Section 401 (Regional Water Quality Control Board), and Section 1600 Streambed Alteration Agreement (CDFW) applications.

Research Experience

Central Valley Habitat Joint Venture, California Department of Fish and Wildlife, Sacramento County, CA, 1999-2001

Participated in research that sought to identify habitat use by a range of waterfowl species including northern pintail, green-winged teal, mallard, and white-fronted geese. Responsibilities included capture using rocket-fired nets and box traps, age and sex classification, attaching transmitters, and tracking movements using aerial and land based telemetry techniques.

United States Geological Survey, Yolo County, CA and California Department of Fish and Wildlife, Sacramento County, CA 1999 - 2001

Participated in research specifically aimed at developing a reliable methodology to index the Pacific Coast population of band-tailed pigeons and to document behavior associated with mineral gravelling and its relationship to nest site selection and nest success. Responsibilities included capture using rocket-fired nets and box traps, age and sex classification, attaching transmitters, tracking movements, and locating nests using aerial and land based telemetry techniques. Location data was determined by triangulation and by the use of Remote Data Systems, Global Positioning Systems, and Geographic Information Systems.

Big Sur Ornithology Laboratory & California Condor Recovery Program, Monterey County, CA, 1997-1998

Collected data related to demographic parameters, reproductive success, survival, and migration of riparian birds. Responsibilities included capture using mist-nets, species identification, age and sex classification, measuring morphological characteristics, behavioral observations, point counts, territory mapping, and habitat assessment. Responsibilities to the condor program included pre-release conditioning, release, tracking movements using land based telemetry techniques, trapping and handling for replacement of radio transmitters, and collecting blood samples, and assisting with the supplemental feeding program.